CASES IN SURGERY, WITH *REMARKS:*

To which is added,

An Account of the Preparation and Effects of the AGARIC of the OAK in ſtopping of Bleedings, after ſome of the moſt capital Operations.

By *JOSEPH WARNER*, F. R. S.
And Surgeon to *Guy*'s Hoſpital.

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MDCCLIV.

TO THE

PRESIDENT,

THE

TREASURER, *and* GOVERNOURS
of GUY'S Hoſpital.

GENTLEMEN,

AS the greateſt part of the Caſes deſcribed in this Collection, have occurr'd to me in the Hoſpital over which you preſide; I have taken the Liberty of Addreſſing them to you, as the only Ackowledgment I can make for the Honour you have done me, in appointing me one of your Surgeons.

DEDICATION.

Should these Papers be found to conduce in any degree to the Advancement of my Profession, or in other Words, to the Benefit of Mankind, I dare say it will be no inconsiderable Pleasure to you, under whose Direction this Charity flourishes, to reflect, that an Hospital is not only the Instrument of Relief to the Distressed who are immediately received there, but also a Means of helping others, by furnishing such Principles and Practice, as may improve the Art of Surgery, and thus render the Benefi more general.

I am, with the greatest Respect,

GENTLEMEN,

your most obedient, and

most obliged humble Servant,

Hatton-Garden,
July 18, 1754.

JOSEPH WARNER.

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CASES IN SURGERY.

CASE I.

Of a fractured Scull with a Wound of the Longitudinal Sinus.

IT is a Maxim with almoſt all Writers in Surgery, to ſpeak of the Impropriety and danger of the Application of the Trepan, upon certain parts of the *Cranium*, previous to a Deſcription of the Operation. The Parts of the Scull which are look'd upon as improper for the Admiſſion of the Inſtrument, are the Sutures in general, the Sagittal Suture in par-

ticular, the whole of the *Os Occipitis*, and the anterior, and inferior Part of the *Os Frontis*. But notwithſtanding it may be right to have a general regard to theſe Rules; yet there are Inſtances where they cannot take place but by wholly neglecting the Operation.

THE particular Attachment of the *Dura Mater* to the Sutures of the Scull in general, and the Courſe of the Longitudinal Sinus under the Sagittal Suture in particular, are not ſufficient Reaſons for the abſolute forbidding the Application of the Inſtrument upon theſe Parts; ſince Fractures of the Scull are ſometimes ſo circumſtanced as abſolutely to require it, and the Patient is otherwiſe incapable of being reliev'd by the Operation.

THE Rule laid down by Mr. *Cheſelden*, in his Obſervation upon Monſieur *Le Dran*, ſeems to be too poſitive, where he ſays, "that no "Inſtrument ſhould ever be applied over the "Longitudinal Sinus, nor ought the Inſtru-"ment to be introduced between that and "the Scull."

AS ſome reaſon and excuſe for my diſſenting from the Opinion of ſo eminent a Man, I am induc'd to offer the following Caſe as a Proof of its Neceſſity under certain Cir-

Circumſtances, and of the little Danger there ſeems to attend even a Wound of the Longitudinal Sinus. An inſtance of which Mr. *Cheſelden* has given us himſelf, where he ſays, " the Longitudinal Sinus, or the Veſſels that " empty into it were wounded by a Surgeon," which he ſays, " he ſtopt by dry Lint; and " had the good Luck to ſave his Patient."

R.——*J.*——aged 13, on the 16th of *November*, 1749, was ſtruck with a pointed Piece of Iron, upon the upper and middle Part of the Head, ſo immediately upon the Sagittal Sature as to force a bit of both Parietal Bones into the Longitudinal Sinus. Immediately upon receiving the Blow, he fell down, and became ſenſeleſs, but in a few Minutes afterwards recover'd, and continued well for ſix Days. At the End of which Time, he was ſeiz'd with Epileptic Fits, which were very frequent, accompany'd with Vomitings, and a Palſy of the left Side; the Sight of his left Eye was perfect, but his right Eye was ſo affected as to make all ſingle Objects appear double. Theſe Symptoms continued till the 27th of *December* following, when he was put under my care. Upon examination, I found

the Circumſtances as related above, and immediately afterwards proceeded to the Operation. Upon taking off the Scalp, there iſſued a continued Stream of Blood through the Hole made in the Bone; I applied the Trepan ſo as to include the Hole made through the Bone, and the Sagittal Suture, within the Circle of the Inſtrument. Upon taking out the circular Piece of Bone, there appear'd a Wound which was made into the Sinus by the bits of Bone that were then ſticking in it, which I enlarged with a Lancet, in order to extract them with leſs Violence. Upon taking them out, the Diſcharge of Blood was increaſed; but upon the Application of dry Lint only, the *Hæmorrhage* ſtopt. Immediately after the Operation, he fainted, but ſoon recovered; in half an Hour's time he expreſs'd an agreeable Senſation on his left Side, and by the next Morning had ſo well recover'd the Uſe of his Limbs as to be able to move them freely to any part of the Bed. In ſix Days after the Operation, he perfectly recover'd the Sight of his right Eye; from this time he continued to mend till the 19th of *January* following, when he accidentally receiv'd a Blow upon his Head. Soon after which,

which, he complain'd of a Numbneſs in his left Arm, and a return of the Dimneſs in his right Eye. Upon taking off the Dreſſings, there appear'd ſome clots of Blood upon them, and his Head was conſiderably diſorder'd till the 26th of the ſame Month, when he grew tolerably well again. Upon obſerving a Fungus to have riſen a conſiderable Height, above the Surface of the Skull, which would not ſubſide with proper Applications aſſiſted by preſſure, I pared it off: This gave him very little Pain, but for a few Minutes afterwards he complain'd of a Numbneſs all over him, which ſoon went off, and he continued well till *February* the 2d, when he complain'd of a Sickneſs in his Stomach, and of acute Pains in both his Elbows. *February* the 3d, as I was dreſſing him, he was ſuddenly attack'd with a Shivering, and the *Dura Mater* appearing particularly prominent, I divided it, and diſcover'd a Piece of Bone ſticking in the Brain, which I endeavour'd to extract, but meeting with conſiderable reſiſtance, was obliged to enlarge the Wound, which admitted of its being more eaſily removed.

A FEW Days after this, he complain'd of conſiderable Pain on the right Side, about

two Inches below the old Wound, which increaſed upon Preſſure: Upon Shaving the Scalp, there appear'd a ſmall Diſcoloration which induced me to repeat the Operation upon this Part. Upon taking out the Bone, the *Dura Mater* appear'd conſiderably elevated, and diſcolor'd: For which Reaſon I divided the *Membrane*, and gave iſſue to a large quantity of Matter, which was confined underneath it. On the next Day he was free from Pain, but on the Day following his Pulſe grew bad, and ſo continued till the Evening, when he expired.

UPON opening his Head, there appear'd a conſiderable Quantity of Matter lodged in the Subſtance of the Brain, particularly in the right Hemiſphere.

Query. Could the want of Succeſs in this Operation be attributed to the Wound of the Sinus Longitudinalis; and is it not reaſonable to hope that the Operation might have been ſucceſsful, if no extraneous Body had been lodged in the Subſtance of the Brain?

THE Wound of the Longitudinal Sinus did not probably produce any dangerous Symptoms, becauſe

becauſe it never bled again after being once ſtopp'd, which was eaſily effected; and if we credit the fourth Obſervation of *Marchetti*, there does not ſeem to be ſo great a Danger attending a Wound of this Sinus as is generally apprehended.

CASE II.

Of a fractured Scull, where the Operation was ſucceſsfully perform'd upon the Lambdoidal Suture.

MAY 1754, *H——A——* aged 18, receiv'd a Blow on the poſterior Part of the Head upon the Lambdoidal Suture, at about an Inch and a half diſtance from its upper Angle, which lacerated the Scalp, and fractured the Scull. Upon examining the Wound, and finding it thus circumſtanced, he was immediately ſcalp'd, which gave me an opportunity of diſcovering the Nature and Extent of the Injury done to the Bone. The Fracture extended to about three Inches in length obliquely upwards upon the left Parietal Bone; and one of the *Oſſa Triquetra* appear'd vi-

ſibly depreſs'd, and beat inward upon the *Dura Mater*. Upon receiving the Blow, the Boy fell down, and became ſenſeleſs, which was ſoon ſucceeded by Vomitings, and a Diſcharge of Blood from the Noſe. In an Hour after the Accident, he was brought into the Hoſpital, and the Operation was perform'd ſo immediately upon the Lambdoidal Suture, as to include the depreſs'd Bone, which could not otherwiſe have been remov'd. Upon taking out the Piece of Bone, the *Dura Mater* appear'd prominent, and tenſe; I divided it with a Launcet, and gave iſſue to a Quantity of Serum that was confined underneath it. From the great Extent of the Fracture, I judged it neceſſary to apply the Trepan a ſecond Time, which was accordingly done upon the Parietal Bone, at about an Inch and half diſtance from the former Place. The *Dura Mater* appear'd here in its natural State; for which reaſon I thought it unneceſſary to divide it. The next Morning after the Operation, the Patient was blooded on account of a fullneſs in his Pulſe, and of the Stupor which ſtill remain'd in ſome degree; in the Evening an emollient Clyſter was adminiſter'd, from which Treatment he receiv'd immediate relief, and

continued

continued to mend from this time without any Relapſe till he perfectly recover'd, which was in nine Weeks after the Operation.

REMARK.

IN this Caſe, the Attachment of the *Dura Mater* to the Lambdoidal Suture appear'd very inconſiderable; and ſeeing the Nature of the Accident was ſuch, as to render the Application of the Inſtrument upon that Part, abſolutely neceſſary to the taking off the Preſſure from the ſubjacent *Membranes* and Brain, which they labour'd under from the depreſs'd Bone; I'm induced to think there could be no doubt of the Propriety of Operating upon the Suture. The Courſe of the Longitudinal, and Lateral Sinuſes, were here quite out of the Queſtion. It has been obſerved by Writers, that when the Head receives ſo violent a Blow as to Fracture the Scull, that the natural Attachment of the *Dura Mater* to the internal Part of the *Cranium*, is broken off, and conſequently there can be very little danger of injuring the ſubjacent *Membrane* with the Teeth of the Saw. Again it is agreed, under ſome circumſtances, to be abſolutely neceſſary to divide the *Dura Mater*, to give iſſue to any ex-

extravaſated Fluid that is confined underneath it, which is often practiſed with ſucceſs. I am induced therefore to think, it has been a Rule too generally laid down by Authors, to forbid the Application of the Inſtrument upon theſe Parts; ſince by following it too ſtrictly, the Trepan muſt neceſſarily be omitted in Caſes that are not otherwiſe to be relieved; in conſequence of which, the Patient is deprived of ſuch benefit, as might probably accrue from the Operation.

CASE III.

Of a Man where the Operation of the Trepan had been ſucceſsfully perform'd upon the Os Occipitis.

IN the two preceeding Caſes, I have given inſtances where it was abſolutely neceſſary to apply the Trepan upon the Sagittal and Lambdoidal Sutures. In the following it will appear, that the Trepan may be likewiſe ſafely apply'd upon the *Os Occipitis*, contrary to the general Opinion of Authors.

ON the 21ſt of *February*, 1753, I gave a Lecture upon the Brain of a Man who was executed at *Tyburn*. Upon ſawing through the Scull (which I have now by me) I obſerved that he had formerly been trepan'd upon the *Occipital* Bone. The Inſtrument appeared to have been apply'd upon the *Os Occipitis*, at leaſt an Inch diſtant from the upper Angle of the Lambdoidal Suture, and very near to the left Side of the *Sulcus*, which is form'd in that Bone for the Reception of the poſterior Part of the Longitudinal Sinus.

THIS Operation muſt have been perform'd a conſiderable time before his Execution, ſince there was a firm *Cicatrix* of the Integuments. There was not the leaſt Appearance of a Callus which had ſhot from the Circumference of the Hole made into the the Bone by the circular Saw. The Cure ſeem'd to be compleated merely by a ſtrict Adheſion of the *Dura Mater*, to the Circumference of the Opening made through the Scull, and by an elongation of the Integuments which compoſe the Scalp. The principal Reaſons given by Authors for the Impropriety of the Application of the Trepan upon this Bone, are theſe: The Unevenneſs of

of its external, and internal Surfaces, and the Courſe of the Longitudinal, and Lateral Sinuſes.

BUT the firſt Objection can be of no great weight; and as the chief Sinuſes poſſeſs only the upper and middle lateral Parts of the *Os Occipitis*, the Operation may, contrary to the general Opinion, be ſafely perform'd upon this Bone, on either ſide the Lambdoidal Suture, as low down as the firſt occipital Ridge, correſponding to which, on the Inſide, are the lateral Sinuſes.

FROM what has been already obſerved in the preceding Caſes, I think it may be fairly concluded, that there is no Part of the Scull upon which the Operation may not be performed in Caſes of Emergency, except, at the anterior inferior Angles of the parietal Bones, on the internal Part of which the *Arteria duræ Matris* runs, and on the anterior and inferior Part of the *Os Frontis*, where its Tables are well enough known to be at a conſiderable Diſtance from each other in Adults, and by this means to form a Cavity diſtinguiſh'd by the Name of the *Sinus Frontalis*.

CASE

CASE IV.

A ſhort Account of ſome extraordinary Facts attending the Operation of Couching, *&c.*

W. L. aged 26, about nine Years ago was ſuddenly attacked with a Dimneſs in both his Eyes, which happened without any previous Accident or Pain in the Head, the Diſorder continued for three Years in much the ſame State, when it began to increaſe, and ſo continued till he became incapable of diſtinguiſhing Objects. He remained under theſe Circumſtances till *March*, 1748, when he came to *London*, and put himſelf under my Care.

THE Diſeaſe was a *Cataract*, or Opakeneſs in each of the *Chryſtalline* Humours; that in in the right Eye appeared to adhere to the inferior Part of the Iris, but without any defect or Alteration in the Shape of the Pupil. He was capable of diſtinguiſhing Light, and Colours. In the left Eye, the *Chryſtalline* Humour was adherent to the greateſt Part of the

the Iris. The Pupil appeared to extend be neath the *Cataract*, and to have change its Shape, from a Circle, to an oblong through the lower Part of which, a ſmal Share of Light was admitted to the Botton of the Eye.

FROM theſe Circumſtances, I judged i improper to meddle with the left Eye, and a the ſame time conſidered the Event of th Operation as precarious in the Right. How ever, I undertook it upon a probability o Succeſs, and couched the right Eye on th third of *April* following.

UPON endeavouring to depreſs the *Cataract* I perceived it to make a conſiderable Reſiſtanc to the Inſtrument, which was occaſioned b its adheſion to the inferior Part of the Iris So that I was obliged to direct my Needl underneath the *Cataract*, and lift it up, be fore I could diſengage it from the Iris, whic I effected with ſome difficulty, and at lengt depreſſed it.

HE ſuffered very little Pain from the Ope ration. In ſix Days after I examined the Eye when the *Cataract* appeared to have reſume its former Situation.

ON the third of *May* following, I couched him a ſecond Time, the *Cataract* ſubſided much more eaſily than before; this Operation was attended with as little Pain as the preceeding: Upon examining the Eye a Week after, I perceived the *Cataract* to have riſen a ſecond Time, but ſo imperfectly, as to cover the lower Half of the Pupil only. The upper Half of it appeared clear, and he could diſtinguiſh Letters through it, by the help of a Convex-glaſs.

I WAS in hopes from this Appearance, that the *Cataract* might in time have ſubſided (as I have frequently known it do under the like Circumſtances) without any farther Operation. But on account of the little Pain which the Patient had ſuffered from theſe Operations, he inſiſted upon a Third, which I performed upon the 23d of the ſame Month, and the *Chryſtalline* was eaſily depreſſed. But ſuch was the Diſpoſition of the *Cataract*, that it roſe up a third Time, but in ſo ſhaking and waſted a Condition, as to promiſe a Speedy Diſappearance. However, the Patient remaining diſſatisfied, and unwilling to return Home upon a bare Probability of its waſting away; I was prevailed upon to perform the Operation a fourth Time.

THE

THE *Cataract* immediately ſubſided upon the ſlighteſt Touch of the Needle, and did not appear again.

THE Patient was capable of reading, and and writing, with the Aſſiſtance of a Convex-glaſs, in a Fortnight after this Operation; and now ſees well enough to follow his Profeſſion of Surgery and Pharmacy. It is remarkable that there was hardly any Inflammation or Pain, in conſequence of either of theſe Operations.

WHEN he firſt began to look at a Candle, or any other ſingle Object, it appeared to him multiplied; and when he firſt read, he conceived of Letters as remaining imprinted upon the Bottom of the Eye for ſome Hours afterwards, but by a little uſe theſe *Phænomena* were quite removed.

REMARK.

FROM this Example it appears, how difficult it is to remove the *Cataract* effectually, when complicated with an adheſion of it to the Iris: and again, how warrantable it may be to repeat the Operation with a Probability of Succeſs, in ſuch Caſes as are attended with the like favourable Circumſtances.

IF

IF the *Chryſtalline* had been totally removed by Extraction, theſe Returns of the Diſeaſe could not have happened. But I am inclined to think, that if it had been attempted by opening the *Cornea*, the Operation would not probably have terminated ſo happily; ſince the vitreous Humour muſt in all likelihood have been wholly, or in a great part diſcharged, in endeavouring at a Removal of the *Chryſtalline*.

INSTANCES of which I have known to occur, attended with ſuch circumſtances, as to render a ſecond Operation impracticable. So that however ſucceſsful this method of Operating may have proved in *Cataracts*, that are quite free from adheſion; yet I think the Operation is not likely to be attended with equal benefit, when they are otherwiſe circumſtanced.

MONSIEUR *Daviel*'s own Accounts of the Succeſs attending his method of opening the *Cornea*, and extracting the *Chryſtalline*, are ſo very extraordinary, as almoſt to exceed probability; and I cannot help conſidering them as partial, when I reflect upon the Accounts given us of the very different Succeſs attending this Operation, when performed by

others in nearly the ſame Manner, as well as from my own Experience.

FROM the reſult of thoſe Experiments, which were made upon nineteen Eyes, by M. *Morand*, M. *Poyet*, and by M. *De la Faye*, of which there is a particular Account given in the Memoirs of the Royal Academy of Surgery at *Paris*, printed in the Year 1753, it appears that the Benefit attending both methods of Operating is ſo nearly equal, as to make it uncertain which of the two is attended with the greateſt Succeſs: So that, in all probability, both methods of Operating may be found to have their Advantages in particular Caſes.

SINCE I have taken the Liberty of making ſome Remarks upon M. *Daviel*'s own Account, of the great Succeſs attending his Method of the Removal of *Cataracts*, by extracting the *Chryſtalline* Humours; perhaps it will not be unacceptable, ſhould I make ſuch an Abſtract from his own Memoir, as immediately relates to this particular, and the Manner of his performing theſe Operations; and upon preſumption of meeting with this Indulgence, I have added a ſecond Abſtract relating to the Event of thoſe ſeveral Operations which were performed by M. *Morand*, M. *Poyet*, and M. *De la Faye*.

A

A ſhort Abſtract from the Memoirs of the Royal Academy of Surgery at Paris, *of an Account of the Operations of the* Cataract, *for the Extraction of the* Chryſtalline, *done by Monſieur* Poyet, *before the Commiſſaries of the Academy, as drawn up by Meſſieurs* Morand, *and* Verdier.

THE Academy has obſerv'd with Pleaſure, the Eagerneſs which has been ſhewn to make the Operation for the *Cataract* more ſimple and perfect, by extracting the *Chryſtalline*, which has been ſucceſsfully practis'd by M. *Daviel*, who has himſelf given an Account of this method, Page 337. See *Acad. Royal of Surg.* at *Paris*, printed *Anno.* 1753. Several Perſons have invented an Inſtrument, and almoſt at the ſame Time, with which the *Cornea* might be divided in ſuch a Manner as to make one Inſtrument only neceſſary.

MONSIEUR *Poyet*, formerly Surgeon of the *Hôtel Dieu*, and lately appointed Surgeon of *La Charité*, hath preſented one of his own Invention. A little Time afterwards, Mr. *Sharp* of *London*, ſent to M. *Morand* the Deſign of another Inſtrument, which he had exhibited to the Royal Society.

MONSIEUR *Poyet* has already made ſome Experiments upon dead bodies with his Inſtrument, before the Commiſſaries nam'd by the Academy for that Purpoſe; they report that it appear'd to them to have ſucceeded particularly well. M. *Morand*, from that time, engaged to ask Leave of the Governors of the Hoſpital of Invalids, for M. *Poyet* and M. *La Faye*, to operate, which they conſented to, out of regard to the great Zeal, which the Surgeons of *Paris* ſhew for their Art.

MONSIEUR *Morand* aſſembled nineteen People diſeas'd with proper *Cataracts*, who were prepar'd for the Operation; and on *June* the 11th, 1753, they were all operated upon, one after another. Six of the Operations were perform'd by M. *Morand*, Six by M. *La Faye*, and Seven by M. *Poyet*, of which take the following Account. M. *Morand* endeavour'd to depreſs the *Cataract* of M. *Vallot*, an Officer, aged 65 Years, but from ſome unaccountable Accident it eſcaped from its Bed, upon being touch'd with the Needle, and was ready to paſs into the anterior Chamber of the Eye. Upon which, M. *Morand* recommended the Patient to M. *Poyet*, as a favourable Opportunity of trying his Operation, which M. *Poyet* accepted

accepted of. When the *Cornea* was ſufficiently divided, the *Chryſtalline* immediately follow'd without any preſſure at all, and no Accident happened. The Cicatrix of the *Cornea* appear'd firm on the eighth Day. The Patient was viſited by the Commiſſaries on *July* 11, and 25, when he declar'd he could not diſtinguiſh Objects. Upon Examination, it was found he had a *Gutta Serena*; and beſides this, a ſecond *Cataract* was form'd by a thickening of the *Membrane* which inveſts the Bed of the vitreous Humour.

John Baptiſt Roux, aged 65, was operated upon next by M. *Poyet*; after the *Cornea* was divided, the *Chryſtalline* fell out upon the Eye being gently preſs'd; the Patient had only a ſlight Inflammation of the *Conjunctiva*; he was viſited by the Commiſſaries on *July* the 11th, and could diſtinguiſh Objects. He was viſited again on *July* 25, and could only ſee Day-light; his Eye was attack'd with an Inflammation; upon the Whole, he ſees but little.

Peter Mercier, aged 64, was next operated upon, by M. *Poyet*, he had no bad Symptoms after the Operation: he ſees very well. The Pupil has chang'd its Figure, and is not quite round.

Francis Riviere, aged 56, was operated upon next, the *Cornea* of his right Eye was opened by M. *Poyet*; the *Cornea* of his left was opened by M. *La Faye*; he has had no accident in the right, but has ſuffered greatly in the left Eye; he can ſee Light, but cannot diſtinguiſh Objects.

Julien Le Gendre, aged 70, had his *Cornea* opened by M. *Poyet*; he has had no accident; the Pupil has chang'd its ſhape, and he can diſtinguiſh Colours.

Claude Boucher, aged 72, had both his Eyes very much ſunk, and his Eye-lids a little cleft: The Section of the *Cornea* of the right Eye was a little too ſmall, by which means M. *Poyet* was oblig'd to preſs the Eye a little more than uſual, to ſqueeze out the *Chryſtalline*. A conſiderable Inflammation ſucceeded this Operation, which was followed with a Suppuration of the whole Globe of the Eye, and the Patient does not ſee at all. The left Eye had no Accident; the Patient ſees indifferently well.

SUCH was the State of M. *Poyet*'s Patients on *July* the 25th, which was ſix Weeks after the Operations.

IT now remains for us to tell his Opinion upon ſome Points, and compare his Operations with the others. M. *Poyet* thinks the Inſtrument for cutting the *Cornea*, ought to be ſtraight like his own; he pretends that the Iris is by that means leſs liable to be wounded, and that the Section of the *Cornea* made with an Inſtrument a little Convex, becomes more difficult.

Mr. *Sharp*'s Inſtrument is alſo ſtraight, M. *La Faye*'s Inſtrument is a little curv'd on the fore part of its Blade. But we have not been able to diſtinguiſh any difference in their advantages; they each of them had one Patient whoſe Iris was a little wounded.

MONSIEUR *Poyet* attributes the Inflammation which befel the Eye of one of his Patients, to the *Conjunctiva* being wounded; but we don't think this a ſufficient Reaſon to account for it. However, we agree with M. *Poyet*, that the *Cornea* ſhould be divided two thirds of its Circumference to facilitate the Exit of the *Chryſtalline*, if it preſents itſelf readily; or to be able by this means to cut with eaſe the *Capſula* of the *Chryſtalline*, if it adheres too much to its Bed. We don't think that the Impoſthumations which happened to the Eye

operated upon by M. *La Faye*, and to that operated upon by M. *Poyet*, are to be attributed to their Inſtruments. Theſe Accidents have happened to M. *Daviel*; nor do we think theſe Accidents peculiar to the Operation of the *Cataract* by extraction of the *Chryſtalline*, ſince we have ſeen them happen in the common method of Couching.

IN fine, we will give a ſhort Account of the Succeſs of theſe nineteen Operations which have been ſucceſſively perform'd.

OF the ſix *Cataracts* couch'd by M. *Morand*, in the common Method, three have ſucceeded, and the Patients ſee very well; three of the *Cataracts* are riſen again.

OF the Six which M. *La Faye* has operated upon by extracting the *Cataract*, there are two that ſee well, two who ſee not ſo well, and two who do not ſee at all.

Of the Seven operated upon by M. *Poyet*, two of them ſee well, two not ſo well, one ſees Day-light, two do not ſee at all.

THIS is a true Account of the Proceedings and Succeſs of the Operations; but we are not anſwerable for any Accidents which may have happened ſince our laſt Examination, as they would be foreign to the Operation.

Abſtract

Abſtract from the Memoirs of the Royal Academy of Surgery at Paris, *publiſh'd Anno.* 1753.

IN Page 338, M. *Daviel* diſtinguiſhes *Cataracts* into two Species only; one he calls the true *Cataract*, or that of a good kind; the other he calls the falſe *Cataract*, or that of a bad kind, when it is accompanied with other Diſeaſes. He ſays, it is not the Colour of the *Cataract* which determines the good Species, but other Circumſtances, ſuch as the Motion of the Pupil of the Eye, and the Ability of diſtinguiſhing Day from Night.

MONSIEUR *Daviel* ſays, he receiv'd the firſt hint of this Operation from an Accident, which happened to him in couching the common way; the *Chryſtalline* was broken into Pieces, and eſcap'd into the anterior Chamber of the Eye. This determin'd him to open the *Cornea tranſparens* to empty the anterior Chamber, after which, the Pupil appear'd clear, and he could diſtinguiſh Objects; but in ten Days after the Operation, there enſued an Inflammation and ſuppuration of the Eye, which he attributed entirely to the Violence done to the vitreous Humour, and to the inner

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Membranes of the Eye in his firſt Attempt; this made him determine not to proceed for the future in the ſame Method, but to begin with opening the *Cornea*, and afterwards to introduce a ſmall Spatula into the anterior Chamber of the Eye, and to diſlodge the *Chryſtalline* from its Bed; which he did upon a Woman, and ſhe was cur'd in fifteen Days.

THE event of this Operation induc'd him to try it upon four more, which he did with Succeſs. But (ſays he) there appear'd to me to be ſtill many things wanting to perfect this Method. After theſe four, he tried the ſame Method upon ſeveral others, but not with equal Benefit. From this time he thought proper to try a new Method of Operating. The preceding Operations had been perform'd by three Inſtruments, *viz.* a curved Needle, a Pair of crooked Sciſſars, and a ſmall Spatula. But he now undertook the Operation with two Inſtruments only, one like a ſmall Biſtory, with which he opened the *Sclerotica:* Afterwards he introduced a ſmall Spatula through the ſame opening into the Eye, betwixt the poſterior Part of the Iris, and the *Chryſtalline* Humour, and by this means eaſily depreſs'd the *Cataract.*

A GREAT many Operations of this kind being attended with Succeſs, as many eminent Surgeons (he ſays) can teſtify, he thought for ſome time this method preferable to any other. He put in Practice all the different Methods of Operating, and with all the different Inſtruments: But he found upon the whole, that when the vitreous Humour, and the ſeveral *Membranes* that are ſituated behind the Iris, are diſturb'd by the Needle, there very often ſucceeded Inflammations and Suppurations of the Eye, and ſometimes an Atrophy of the Globe, with other Accidents. On which account he at length dropp'd this method, and determin'd for the future to Operate by opening the *Cornea*, as he had done at firſt.

IN the following Manner, he ſays, he has performed two hundred and ſix Operations, out of which, one hundred and eighty two have ſucceeded.

IT is of no Conſequence (he obſerves) of what kind the *Cataracts* are, whether ſoft, hard, of long ſtanding, or of different Colours. The Operation will ſucceed equally well, if the Eyes be found in other reſpects, becauſe the principal Intention of his Operation is the Ex-

Extraction of the *Chryſtalline*, which is eaſily effected by theſe means. The Inſtruments he employs are a curv'd Needle with a ſharp Point, and Sides like a Launcet; a blunt pointed curv'd Needle, with ſharp ſides; a Pair of crooked Convex Sciſſars; a ſmall Spatula of Gold, Silver, or Steel a little curv'd, to lift up the *Cornea* with, another ſmall pointed Needle, which cuts on both ſides to open the *Capſula* of the *Chryſtalline* Humour; a ſmall Golden, Silver, or Steel Curette to facilitate the Iſſue of the *Chryſtalline*, or to draw out the remaining Fragments when they ſtick to the Edge of the Pupil; and beſides theſe, a ſmall Pair of Pincers to take out any pieces of the *Capſula* of the *Chryſtalline*. The Method of his Operating is this; he places the Patient oppoſite to him, upon a Seat of a convenient height, and covering one Eye with a Bandage, the upper Eye-lid of the other is help up by an Aſſiſtant plac'd behind the Patient, and the under Eye-lid is held down by the Operator, who places his Elbow upon his Knee by way of ſupport to his Arm; then he plunges the firſt Inſtrument like a Launcet into the Bottom of the *Cornea*, near the *Sclerotica*, and thruſts it a little above the Pupil, taking

aking care not to wound the Iris; this being lone, he withdraws this Inſtrument; then introduces the blunt pointed Needle, with which ne enlarges the Inciſion by cutting on each ide ſtill more; as the *Cornea* is now grown laccid, he makes uſe of a Pair of curved Convex Sciſſars, with which he enlarges the Wound on each ſide ſtill more, till the *Cornea* is divided near three Parts round; then ne introduces a ſmall Spatula into the Wound, with which he lifts up the *Cornea*, and afterwards proceeds to wound the *Capſula* of the *Chryſtalline* with a ſharp ſmall couching Needle. Sometimes, ſays he, this *Membrane* muſt be cut all round in order to bring it in irely out, if it is thickened and wrinkled, or fear it ſhould obſtruct the Pupil; when it s is ſo cut, it may be extracted with a Pair of Pincers: After having cut the *Capſula* in this nanner, the Spatula may be introduc'd bewixt the Iris and *Chryſtalline* to detach it rom its Bed, and facilitate its Exit.

THE *Cornea* is then to be put in its proper ſituation again, and at the ſame Time the nferior Part of the Globe of the Eye muſt be gently preſs'd, by which means the *Chryſtalline* nay be ſqueez'd out without breaking the poſterior

terior Part of the *Capſula*, which keeps the vitreous Humour in its proper Place. M. *Daviel* ſays, he thinks there are no Inconveniencies attending this method of Operating, but what may with care be avoided; and it has this great Advantage over others, that the *Cataract* can never riſe again.

The Manner of performing the Operation of extracting the Cataract *with one Inſtrument only, by Mr.* Warner.

THE Manner in which I perform the Operation is this.

THE Patient being ſeated in a Chair of a convenient height, with a low Back, I ſeat myſelf exactly oppoſite to him in another Chair of an equal height; this being done, an Aſſiſtant ſtands behind the Patient, who places his right Hand under the Chin, after having firſt cover'd the right Eye with an Handkerchief, and pulling his Head back againſt his Breaſt, he directs his Face upwards to prevent the Diſcharge of the vitreous Humour, and to keep him ſteady. The ſame Aſſiſtant lifts up the ſuperior Eye-lid with the fore and middle Finger of his left Hand;

Hand, taking great Care not to preſs the Globe of the Eye above. I then depreſs the inferior Eye-lid with the fore and middle Finger of my left Hand; at the ſame Time taking notice not to preſs the Globe of the Eye below.

THE Patient is directed to keep his Eye as ſteady as poſſible, looking with it ſtraight forwards, and a little upwards. I then plunge the Knife ſuddenly into the Globe of the Eye on its external Part near the Circumference of the *Cornea*, and oppoſite to the Center of the Pupil, directing it forwards betwixt the Iris and the *Cornea*, till its Point comes out on the oppoſite Side; by this means, the *Cornea* becomes at leaſt half divided in its circumference. The Knife being kept in the Eye the whole Time, muſt be gently drawn backwards, and its Point carefully introduc'd through the Pupil, with which the *Capſula* of the *Chryſtalline* Humour is divided. Immediately after the Diviſion of this *Membrane*, I preſs the Globe of the Eye gently upwards with the fore and middle Finger, which have been hitherto kept upon the inferior Eye-lid, and by this means ſqueeze out the *Chryſtalline* Humour through the Wound; the Knife being ſtill retain'd in the anterior Chamber

ber of the Eye, the *Cornea* becomes a little elevated, and the Exit of the *Cataract* is on this Account faciliated.

I LOOK upon the Diviſion of the *Capſule* of the *Cataract* to be of great Conſequence in many Inſtances, ſince this *Membrane* becomes ſometimes ſo tough and thickened, as to make a very conſiderable reſiſtance to the Preſſure; in which Caſe, a great part, or the whole of the vitreous Humour is diſcharg'd, and the *Cataract* ſometimes remains behind, which will not admit of a ſecond Attempt to an Operation.

BUT it ſometimes happens, that the *Cataract* immediately follows the Diviſion of the *Cornea*, without making any external Preſſure upon the Globe, owing probably to the involuntary Contraction of the Muſcles of the Globe, which draw the Eye inwards, and compreſs it on ev'ry ſide.

THIS Operation cannot be properly perform'd, but upon ſuch as have the Power of keeping their Eyes from rolling about.

THE *Speculum Oculi* muſt never be made uſe of in this Operation, ſince the Compreſſion from the Inſtrument has been found to be ſo great, as to ſqueeze out the whole of

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the vitreous Humour, even before the Operator could make the Wound ſufficiently large through the *Cornea*, for the Expulſion of the *Chryſtalline* Humour.

IT very often happens that a Part of the vitreous Humour is diſcharg'd in the moſt ſucceſsful Operation; but I have never known it happen otherwiſe in ſuch Caſes than to be ſoon reſtor'd, and the Eye to reſume its natural Figure, by being repleniſh'd either with a freſh ſupply of the vitreous or aqueous Humour, or both.

THE Inflammation ſucceeding this Operation is generally very conſiderable; but neither that, nor the Operation, ſeems to be very painful. It is generally ſeveral Weeks after the Operation, before the Inflammation of the Eye is diſpers'd.

DURING this State, it ſhould be treated with emollient Fomentations, and cooling Ointments, and the Patient's body kept open.

IF the *Cornea* of the right Eye is to be divided, the Operator places himſelf in the ſame Situation as has been already directed, ſuppoſing he has a Power of uſing his left Hand to Advantage; but if he has not a ſufficient command of his left Hand, he muſt ſtand be-

hind the Patient, and, after having lifted up the ſuperior Eye-lid, uſe his right Hand; his Aſſiſtant at the ſame time ſtanding before the Patient, and holding down the under Eye-lid with the ſame precautions already given.

WHEN the *Cornea* is divided, and the *Capſula* of the *Cataract* wounded, the Aſſiſtant muſt preſs gently upon the inferior Part of the Globe of the Eye, and ſqueeze out the *Cataract*.

THE Knife to be made uſe of in this Caſe, is exactly like that which is us'd in the Performance of the Operation of cutting the Iris, only that it muſt be about three times as broad, and about twice as thick.

CASE V.

Of an extraordinary Tumour in the right Orbit of the Eye.

R. S. aged 42, had a large ſchirrous Tumour formed in the ſuperior Part of the Orbit, which had been growing ſeven Years, and was now become ſo large as to puſh the Globe of

of the Eye conſiderably downwards, and out of its Socket. It appeared at firſt in the Shape of a ſmall moveable Swelling, which took its riſe under the upper Eye-lid.

THE Tumour increaſed gradually, and without Pain for the the four firſt Years. For the three laſt Years it became very troubleſome, and full of Pain, which extended to the whole of that Side of the Head.

THE Sight of the Eye became impaired in proportion to the increaſe of the Tumour.

ON the 30th of *March*, 1749, he was admitted in the Hoſpital, and in ten Days afterwards it was cut out.

THE Tumour was found to extend itſelf from the outer Corner of the Eye, to within a very little of the inner Corner, and quite to the Bottom of the Socket. The Operation was difficult, and attended with conſiderable Pain, which continued for ſeveral Days, ſoon after which he became perfectly eaſy. During the Cure, there was a large Diſcharge from the Wound; in about eight Weeks the Wound was healed, and he continued perfectly eaſy. His Sight was much the ſame, as before the Operation.

REMARK.

WHEN the Eye is thruſt out of the Orbit by a ſubjacent Tumour, the Tumour frequently takes its riſe from the Brain itſelf; which Circumſtance renders the Operation impracticable. Sometimes the Tumour, though it ariſes within the Orbit, is of a cancerous Nature, and affecting all the Contents of the Orbit, renders the abſolute Removal of it impoſſible. Theſe Circumſtances have brought the Operation into Diſrepute. But there may be a Species of ſchirrous Tumour within the Orbit, where the Operation may be attended with Succeſs.

NOTWITHSTANDING, that after the Cure in the preceding Inſtance, the Eye remained in the Poſition it was before the Operation, and with the ſame Imperfection of Sight (from probably the Compreſſion which the optic Nerve had ſuſtained) yet the Patient being free from Pain, and in every other reſpect perfectly well, was ſufficiently recompenſed for the Pain of the Operation.

CASE

CASE VI.

Of an uncommon Tumour upon the Roof of the Mouth.

A. *B.* aged 40, had a Tumour formed upon the Roof of his Mouth, which at length had arrived to ſo great a Size, as to prevent his feeding upon any thing but Liquids. The Tumour had been growing about ſeven Years, and at length poſſeſſed the whole Roof of the Mouth. He came to *London*, in *June* 1747, and was admitted into the Hoſpital under my Care. In conſideration of the foregoing Circumſtances, and the Improbability of procuring Relief by any other methods, it was recommended to him to have it cut out; but at the ſame Time the Operation was judged hazardous from the *Hæmorrhage* that might probably ariſe from it, and the Difficulty of ſtopping it, as had happened ſometime ago in a ſimilar Caſe; but as no other Methods could be thought on for his Relief, I undertook the Operation, and performed it in the following Manner.

THE Patient being properly ſeated, and ſecured, a piece of Wood was placed betwixt the Teeth on the left Side of his Mouth; and a curved Knife, ſuch as Gardeners make uſe of in pruning Trees, was conveyed to the poſterior Part of the Tumour, with which I effectually ſeparated the Tumour from its Baſis. The *Hæmorrhage* that enſued upon the Operation was ſo trifling, as to require no Pains in ſtopping it. But in a few Hours afterwards, a conſiderable Artery burſt out, which bled freely, and could not be reſtrained by preſſure, or other gentle means. Seeing this, and conſidering the Impoſſibility of uſing the Needle and Ligature to Advantage, I had recourſe to the actual Cautery, which anſwered the End, and the Patient was perfectly cured in three Weeks, without farther trouble.

UPON opening the Tumour it was found to conſiſt of a firm cartilaginous Subſtance mixed with long boney Particles.

REMARK.

THE actual Cautery is hardly ever made uſe of in *England* by Surgeons of the preſent Age, to ſtop bleedings. The crooked Needle and Ligature are for many Reaſons juſtly preferr'd

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to it. But nevertheleſs, there are ſome Inſtances where the actual Cautery may be found neceſſary, as the preceding Caſe undoubtedly proved.

CASE VII.

Of an encyſted Tumour ſituated upon the fore-part of the Neck, ſucceſsfully extirpated.

A. B. A Girl of about 14 Years of Age, had a Tumour formed upon the Fore-part of her Neck, immediately beneath, and on the left Side of the thyroid Cartilage; the Tumour had been growing about four Years, and was at length become ſo troubleſome from its Situation and Size, as to occaſion a Difficulty in breathing, and a total Inability of ſwallowing any thing but Liquids. It was of the encyſted Kind, and compoſed of a Quantity of Fluid. Its Situation was betwixt the *aſpera Arteria* and the *Æſophagus*, as appeared in the Operation. It was cut out, and the Patient did well in a few Weeks. But on Account of its deep Situation, only a Part of the

Cyſt was diſſected out, the reſt of it came away in a few Days afterwards with the Dreſſings. The Patient, ſince the Operation, has been free from any Inconvenience in breathing, or ſwallowing; and is otherwiſe perfectly well.

REMARK.

THERE is a Species of Tumour ſometimes formed betwixt the *Aſpera Arteria* and the *Æſophagus*, which from its ſchirrous Nature, extent of its Baſis, and deep Situation, renders all Attempts to Extirpation unadviſeable. An Inſtance of which, *Tulpius* has given us in the 44th Chapter of his firſt Book of *Obſervations*.

A CASE ſimilar to that, I was conſulted about ſome time ago, in a Man 55 Years of Age. The Tumour increaſed ſo faſt, as to deſtroy him in a few Months. But where the Tumour is differently circumſtanced, both as to its Nature and Contents, the Operation may be adviſeable, as the preceding Inſtance undoubtedly proves. The Succeſs of which ſufficiently warranted the Undertaking.

CASE

CASE VIII.

Of a Steatoma, *poſſeſſing the greateſt part of the Neck on one Side, ſucceſsfully extirpated.*

S. G. aged 45, had a large Tumour on the right Side of her Neck, which had been growing for twenty Years. It was much larger at its Baſis, than at any other Part, and extended from the right maſtoid Proceſs, to the Clavicle on the ſame Side; and from all the *Vertebræ* of the Neck to the maſtoid Muſcle, under which a Part of it was ſituated. The Tumour was not attended with Pain, but had of late become ſo inſupportable from its ſize, as to render her incapable of Service. Under theſe Circumſtance, ſhe applied to me. I ſaw no Objection to the Operation, and accordingly adviſed it, which was complied with. There was no extraordinary Circumſtance or Difficulty attending the Operation, but that it required ſome care and nicety in Diſſecting out that Part of the Tumour which lay under the maſtoid Muſcle upon the internal

ternal Jugular Vein, and carotid Artery. There was but one Veſſel which required tying, (a Circumſtance very uncommon in a Swelling of this Size, which weighed near four pounds.)

IN the Operation, all that part of the *Trapezius* Muſcle covering the back Part of the Neck, was laid bare. The whole of the *Platyſma Myoides* was taken away with the Tumour, and the *Coracohyoidæus* Muſcle appeared in view. After the Tumour was removed, and the *Hæmorrhage* ſtopp'd, I paſſed the Needle and Ligature twice through the Integuments, in a tranſverſe Direction, to prevent their Retraction; by which means I hoped the Cure might be haſtened. This ſeemed to have the deſired Effect, and the Wound was perfectly healed in ſix Weeks.

REMARK.

IN all ſteatomatous Tumours, it is abſolutely neceſſary to remove the whole in the Operation, if poſſible; and not truſt to the Effects of Dreſſings, for the Removal of any part that is left behind.

I HAVE known an Inſtance, where, by truſting to this Method, it has been found neceſſary to repeat the Operation, which ſeldom fails to bring a Reflection upon the Surgeon.

I ONCE knew an Inſtance of this Kind in the Caſe of a *Steatoma*, which grew in the inner Corner of the Eye. Its Baſis was ſituated upon the *Lachrymal Sac*; which, it was apprehended, there was a Danger of wounding with the Knife. On this Account, a very ſmall Share of the Tumour was left behind. This in a few Months afterwards, arrived to the Size of the former Swelling, and required a Repetition of the Operation, which was then effectually executed, as I had an opportunity of informing myſelf ſome Years afterwards.

CASE IX.

Of an incurable Diſeaſe of the Æſophagus.

I HAVE already given an Inſtance of a difficulty in Swallowing, which aroſe from a Preſſure made upon the *Æſophagus*, by a conſiderable Tumour that appeared externally upon the Throat; and obſerved that the Patient was cured in conſequence of its Extirpation. I took notice likewiſe, that ſome

of

of theſe Tumours ariſing in the neighbouring Parts, are not to be relieved by Operation, on account of their great Extent, *&c.*

BESIDES the incurable Tumours to which theſe parts are liable; there is another Species of Diſeaſe, which ſeems equally dreadful in its conſequences, and incapable of being relieved by Phyſick or Surgery. This Diſeaſe is but too common, though not to my knowledge as yet deſcribed by Writers.

IN *July*, 1752, *F. L.* a young Woman aged 25, was admitted into *Guy*'s Hoſpital, and put under the Care of the Phyſician, on account of a Difficulty in Swallowing, with which ſhe had been afflicted for ſome Months. She had made uſe of all the Means that could be thought of in Phyſick for her Relief, but to no purpoſe.

THERE was nothing appeared outwardly that could lead to the Diſcovery of the Malady, but ſhe complained of a particular Tightneſs in Swallowing, juſt below the back part of the *cricoid Cartilage*. The Part affected was ſituated too low to be looked into, but it was eaſily diſcovered by conveying down the Throat a bit of Spunge faſtened upon Whalebone, and dipt in Sweet-Oyl; which, though very

very ſmall, could not be made to paſs beyond it. She at length became incapable of taking any nouriſhment, and died ſoon after.

I OPENED the Neck after her Death, and inquired minutely whether I could diſcover any Swelling behind the *Æſophagus*, or betwixt that, and the *Aſpera Arteria*; but there was nothing of this Nature that could be ſeen.

UPON taking out the *Æſophagus*, it appeared conſiderably thicken'd about an Inch in length, juſt beneath the *cricoid Cartilage*.

UPON opening the *Æſophagus* length-ways, its Coats appeared ſo contracted in the diſeaſed Part, as to be only juſt capable of admitting a Paſſage to a common Probe. The internal Coat of the *Æſophagus* was in part ulcerated, and beſmeared with Matter.

THE *Larynx*, *Aſpera Arteria*, &c. appeared ſound and well.

REMARK.

I AM afraid that this remarkable Caſe is one, amongſt the many in Phyſick and Surgery, that could not poſſibly have been prevented, or even relieved, if its Nature had been originally known; and that this Obſervation only tends

tends to prove, what muſt unavoidably be the Fate in other Diſeaſes of the like Nature.

HOWEVER, as it is always a Satisfaction to the Surgeon, and implies Judgment in him to be able to prognoſticate with ſome Degree of certainty, what may probably be the Event of a future Diſeaſe of the like Kind, and by this means prevent the Adminiſtring of many uſeleſs Applications; for theſe Reaſons, this Obſervation may not probably be eſteemed altogether uſeleſs.

CASE X.

Of a Tumour ſituated upon the Forehead.

WHEN a Tumour, Excreſcence, or any preternatural Appearance is born with Children; the *Phænomenon* is generally diſtinguiſhed by the Name of a Mark, and attributed to ſome particular Deſire of the Mother during Pregnancy. There are ſome of theſe which are Tumours of the encyſted Kind and though at firſt they appear inconſiderable yet it frequently happens that they do not remain

main long in this State, but by gradually increasing, at length arrive to a considerable Size, proving troublesome, and unseemly from their Situation and Appearance: To prevent which, it is generally advisable to remove the Tumour when small; by which means much Pain is prevented, and the Scar arising from the Wound becomes inconsiderable.

I WAS consulted some Years since in the Case of a Child near a Year old, who was born with a Tumour of a Claret Colour upon the Face; it was at first no bigger than a common Pea, but before she had arrived to this Age, the Tumour was increased to the Size of a Wallnut.

IT was judged advisable to have it cut out, which was done, and the Patient was cured in a little Time.

CASE XI.

Of a Tumour situated upon the Occiput.

IN the Year 1750, I was consulted in the Case of a Child, near two Years old, who had a Tumour situated upon the *Os Occipitis*.

The

The Tumour was as large as a Turkey's Egg, and appeared filled with a tranſparent Fluid. It aroſe from the back Part of the Brain, which was eaſily diſcovered, by examining the Baſis of the Tumour. There was a Defect of almoſt the Whole of the *Os Occipitis*. The Child was luſty and ſtrong, and had no viſible Diſeaſe in its Limbs. I adviſed nothing, but to defend the Tumour from external Accidents; but the Parents being diſſatisfied with my Advice, conſulted another Surgeon, who adviſed the Extirpation of it, which he did, and the Patient died in a few Days afterwards.

REMARK.

THIS is a Species of encyſted Tumour, which is ſometimes ſeated upon the *Vertebræ* of the Loins, ſometimes upon the *Vertebræ* of the Back, and at other times upon thoſe of the Neck, *Os Sacrum*, or betwixt the Sutures of the Scull; all of which I had ſeen before. But I had never before now, ſeen an Inſtance of a Tumour of this Kind upon the *Os Occipitis*. Theſe Tumours are to be diſtinguiſhed from all others by their Riſe, Situation, the Circumſtance of their being always born with the Subject, who is generally

generally afflicted with a partial Palsey; and by their Contents, which are Fluid, and commonly transparent.

THEY take their rise from the Brain, or spinal Marrow, where there is a visible Defect of the Bone; which from the Circumstance of the Spine being divided, or rather defective in it its processes, in that particular part, has given them the Name of *Spinæ Bifidæ*.

THE opening of these Tumours by Incision, or taking them off by Ligature, has been always found to be fatal; as observed by *Tulpius*, in the 29th and 30th Chapter of the 3d Book of his *Observations*; and by *Ruysch*, in his 34th, 35th, and 36th *Observations*. *Ruysch* observes, that Children thus afflicted, seldom live to fifteen Months old: but I knew an Instance of a young Man of twenty Years old, who had one of these Tumours upon his Loins. He was healthy, but had laboured under a Paralysis of his Legs from his Infancy; but not so bad a one, as to disable him from walking.

FROM this Observation I would infer, that it is always unadviseable to attempt the Extirpation, or opening of these Tumours; which

piece of Advice has been peremptorily delivered by *Tulpius*, in the following Words. *Cave Sis improvidè unquam aperias, Quod tam facilè occidit hominem.* N. B. *Ruyſch* has given us a Caſe like this in his 52d *Obſervation.*

CASE XII.

Of an extraordinary Diſeaſe of the humeral Artery.

WHEN a Bone, and its neighbouring Tendons and Ligaments are affected with Inflamation, Caries, *&c.* The Diſeaſe may ſometimes extend itſelf farther, ſo as to affect the neighbouring Veſſels; or it may probably happen, that the Diſeaſes of theſe particular Parts may ſometimes proceed from a previous affection of thoſe very neighbouring Veſſels, from which they receive their nouriſhment and growth.

C. D. was afflicted with a Caries of the Joint of the Elbow, which was attended with ſuch Circumſtances as rendered the Amputation of the Limb neceſſary. The Operation was performed

at

at a proper Diſtance above the diſeaſed Part, and the Veſſels were taken up by the Needle and Ligatures.

IN a few Days after the Operation, the humeral Artery became ſo dilated above the Ligature, as to endanger its burſting. Upon this Account, it was judged neceſſary to perform the Operation for the Aneuryſm, which was done, and the Veſſel ſecured by Ligature above the upper Extremity of its diſtended Coats. After this, every thing went on ſeemingly well for ſome time, when ſuddenly the Artery appeared again dilated, and in Danger of burſting above the ſecond Ligature. Theſe Circumſtances made it neceſſary to repeat the Operation for the Aneuryſm; from this time every thing went on ſucceſsfully, till the Stump was at the Point of being healed; when, quite unexpectedly, the Artery appeared a third Time diſeaſed in the ſame Manner as before; for which Reaſon a third Operation for the Aneuryſm was determined upon, and performed.

THE laſt Operation was near to the *Axilla*, and the Patient continued well from this time without any Relapſe.

Query. Could the ſeveral Aneuryſms of the humeral Artery be attributed to the ſudden

Check alone, which the Blood met with from its Extremity being ſecured by Ligature; or is it not more reaſonable to ſuppoſe, that the Coats of the Artery, nearly as high up as the *Axilla*, were originally diſeaſed and weakened? The latter ſeems the moſt reaſonable way of accounting for theſe ſucceſſive Returns of the Diſeaſe of the Veſſel; ſince it is found from Experience, that ſuch Accidents have been very rarely known to occur after Amputations, either of the Arm, or Thigh, where nearly the ſame Reſiſtance muſt be made to the Circulation in every Subject of an equal Age and Vigour, who has undergone the ſame Operation.

IF it ſhould be ſuppoſed that the ſeveral Dilatations of the Coats of the Veſſels aroſe merely from the Check in the Circulation; it will not be eaſy to account for the final Succeſs of this Operation; and eſpecially when we reflect, that the Force of the Blood is increaſed in proportion to its nearneſs to the Heart.

THE Nouriſhment of the Stump may be accounted for, from the Ramifications ariſing from the principal Trunk about the *Axilla*, which becoming dilated, in proportion to the Reſiſtance the Blood meets with in its paſſage through the humeral Artery, were found ſufficiently

ficiently numerous and large to convey a proper Supply to the Parts beneath.

THIS Species of Aneuryſm I have been deſcribing, is diſtinguiſhed by the Name of the true Aneurſym, and is a Diſeaſe which frequently happens to the *Curvature* of the *Aorta*, extending ſometimes to both ſides the Neck, ſometimes producing convulſive Fits, and admits of no other than a palliative Relief.

CASE XIII.

Of an Aneuryſm of the humeral Artery.

H. M. aged 37, was admitted into the Hoſpital in *July* 1753, with a Diſeaſe of the right Arm, which upon inquiry was found to be greatly ſwelled and enlarged. The Tumour extended from a little above the bending of the Elbow, to pretty near the middle of the Cubit; and appeared ſomewhat diſcoloured, and pointed on its ſuperior part. Upon preſſing the Tumour, I diſcovered a Fluctuation, but there was not the leaſt perceivable Pulſation. He informed me of his having been

blooded in the Baſilic Vein about 13 Months ago, that he felt conſiderable Pain from the Operation, and that the Blood was diſcharged through the Orifice by leaps. Immediately after being blooded, he perceived a ſmall Tumour to ariſe in the Neighbourhood of the Orifice, which in a Week's time arrived to the Size of an Egg, and continued to increaſe gradually for nine Months. For a few Weeks after the Accident, the Limb was diſcoloured from the Shoulder to the Wriſt, owing, without doubt, to the confinement of the extravaſated Blood. He had conſiderable Pain for the firſt three Months.

THE Operation was determined upon, and performed in the following Manner. The Tourniquet being fixed upon the humeral Artery, and the Arm diſpoſed in a proper Situation, and firmly ſecur'd.

AN Inciſion was begun at the upper Extremity of the moſt prominent Part of the Tumour, and continued downwards about three Inches, directing the Knife in ſuch a Manner as to deſcribe the half of an Oval; then a ſecond Inciſion was made on the oppoſite Side in the ſame Manner; by which means an oval Piece of the Integuments was cut out. Upon their removal,

removal, the Contents of the Tumour were discharg'd. It consisted of a large Ball of coagulated Blood of a fibrous Texture contained in a thick Cyst, which appeared like the Coats of a Vein. Upon slackening the Tourniquet, the Wound of the Artery appeared circular, and its Coats were discoloured, and thickened at least an Inch above its Division. A crooked Needle with a Ligature was passed under the Artery above the diseased Part, and tied upon it, *&c.* A second Ligature was made upon the Artery below its Orifice, which should always be done to prevent the risk of an *Hæmorrhage* from this Part; since it has been found that by neglecting to do this, a considerable Discharge of Blood has ensued some Days after the Operation, and the Patient's Life been brought into imminent Danger by a Reflux of Blood from the neighbouring Anastomoses. After the Operation, the Wound was dressed in the common manner, and the Patient removed to bed.

IMMEDIATELY upon tying the Artery, he complained of a Numbness in his Fingers, and no Pulsation could be discovered in his Wrist; but in half an Hour after the Operation, a very regular Pulsation appeared, and his Numbness began to go off. FROM

FROM this time he went on very well for ſeveral Weeks, but was at length ſeized with general Convulſions, attended with the Symptom of a locked Jaw, which killed him.

REMARK.

AS a Pulſation in the Part is one of the principal *Characteriſtics*, by which an aneuryſmal Tumour is diſtinguiſhed from a Tumour proceeding from any other Cauſe; the want of it in the preceding Caſe may be accounted for, from conſidering the Diſtance which the Artery was at from the Integuments, occaſioned by the Quantity of extravaſated Blood which lay upon the wounded Veſſel; and again, there could be no room to doubt of the Nature of the Diſeaſe, as the original Symptoms were a ſufficient Proof of its certainty. The want of Pulſation in this Inſtance is not peculiar, ſince by the ſucceeding Caſes it will appear, that they were likewiſe attended with the ſame Circumſtances, partly from the ſame Cauſe, and partly from the deep Situation of the Veſſel under the *Gaſtrocnemii* Muſcles, which rendered their Pulſations equally imperceptible.

THE Circumſtance of a locked Jaw is no very uncommon Symptom; it ſometimes comes

comes gradually on after a Wound, a Fracture of a Bone, Diſlocation, or in Conſequence of the Stricture made upon the Arteries, and their neighbouring Parts by Ligatures; at other times this Symptom happens on a ſudden, and is generally the Fore-runner of a ſpeedy Diſſolution. But there are Inſtances where theſe Symptoms have been effectually removed by large Bliſters applied to the whole of the back part and Sides of the Neck.

Two Inſtances of which ſucceſs, I remember to have ſeen within theſe few Years. It is generally adviſed upon undertaking an Operation of this kind upon the Arm, to have the Amputating Inſtruments in readineſs, leaſt a Mortification ſhould enſue upon the Parts beneath the Ligatures, in conſequence of an Obſtruction ariſing in the Veſſels. But notwithſtanding this is a Circumſtance which may poſſibly happen, yet I muſt own, amongſt the ſeveral Operations of this Kind which I have performed myſelf, or ſeen performed by others, I never once knew an Inſtance of its turning out ſo unfortunately, as to require Amputation.

CASE

CASE XIV.

Of an Aneuryſm of the Arteria Tibialis Poſtica.

J. B. aged 34, the laſt Week in *April*, of the Year 1748, was taken with a Cramp a little below his Ham, which was followed with an immediate ſwelling of the Calf of the Leg, attended with exceſſive Pain; it continued in much the ſame State till the Month of *July* following, when it began to increaſe both in Size and Pain.

THE whole Leg was exceedingly tenſe, but there was not the leaſt Pulſation to be diſcovered.

ON *October* 15, the Operation for the Aneuryſm was attempted.

UPON opening the Tumour, the congealed Blood appeared to have acquired a fleſhy Conſiſtence; and adhered very firmly one Portion of it to another. Upon removing it totally, the *Tibia* and *Fibula* were found carious, and the Orifice of the ruptured Artery appeared juſt between the Heads of the *Tibia*

and

and *Fibula*, ſo that it was impracticable to tie it, or at leaſt judged unadviſeable, conſidering the Condition of the Leg.

IT was amputated above-knee on the Spot, and the Patient did well.

UPON opening the Knee, the *Os Femoris* was affected, and conſequently the Artery diſeaſed above the Part where it appeared to be ruptured. Some Years ago, the Operation for the Aneuryſm was performed in a ſimilar Caſe within a few Hours after the Rupture of the Veſſel. The Tumour increaſing ſo faſt, and the Pain proving ſo intolerable, that it was neceſſary to looſe no time.

THE *Tibialis Poſtica* was burſt in the Middle of the Leg, it was taken up with ſome difficulty, and the Patient recovered.

REMARK.

WHEN we are convinced of the ſame Species of Aneuryſm happening to any part where ſufficient Preſſure cannot be made to reſtrain the *Hæmorrhage*; it is generally adviſeable to proceed immediately to the Operation, leſt the neighbouring Parts ſhould become ſo affected by the Extravaſation, as to bring on a Rotteneſs, and by that means render the

the Operation impracticable, as happened in the firſt Inſtance, where it was found neceſſary to part with the Limb to ſave Life.

IN the ſecond Inſtance, it is probable that this was prevented by the timely Aſſiſtance given by the Operation.

IN Aneuryſms of the Arm proceeding from a Wound of the Artery by a Launcet, the Caſes are differently circumſtanced; and though it is found in general, neceſſary to proceed to Inciſion and Ligature for their Cure, on account of the Part having been neglected for ſome time after the Accident; yet there are Inſtances of Caſes, where, upon timely Application, the Cure has been effected merely by Compreſs and Bandage; which I would recommend to be firſt of all tried in recent Caſes, and to be continued for three or four Weeks at leaſt, if there is no very good reaſon to forbid it.

THE Manner in which the Wound of the humeral Artery has appeared, upon Examination after Death, to be cured, is by an intimate Coheſion of the *Aponeuroſis* of the *Biceps Muſcle*, of the *Capſula*, and of the Wound of the Veſſel; and it has been farther obſerved, that the Orifice made in the Artery (which

appeared

appeared circular) has been ſtopt up with a Clot of ſolid Blood, reſembling, on its external part, the Head of a Nail; which adhering firmly to the *Cicatrix* of the Integuments, produced a conſiderable Calloſity.

CASES XV and XVI.

Two remarkable Caſes of Ganglions, *where the Operations were performed with Succeſs.*

GANGLIONS, or Tumours formed upon the *tendinous* and *ligamentous* Parts of the Extremities, are a Diſeaſe ſufficiently known to every Surgeon of Experience, and have been treated of by moſt Writers under the Head of encyſted Tumours.

THE Parts moſt frequently attacked with this kind of Swelling are the Hands and Feet; but there are Inſtances of their appearing upon many other parts of the Body; an extraordinary Inſtance of which I was ſometime ago conſulted in, that poſſeſſed the whole back Part of the Neck.

THESE Tumours ſometimes take their riſe from a Strain, and at other times they happen

pen without any previous Accident. Unleſs they diſperſe of themſelves, or are removed by Art when recent, they frequently increaſe to a conſiderable Size, proving very inconvenient by depriving the Part of its Strength and Motion.

THE Methods preſcribed for their Cure are various, but thoſe which are ſaid to have been found moſt effectual, are conſtant Preſſure, and ſudden Blows, which may have ſometimes ſucceeded. At other times the Tumour has been known to diſappear for a Time only, and at length has returned again, owing without doubt to the Cyſt being left behind; which is well known to be frequently the Caſe in every other Species of encyſted Tumour, where the Bag is not ſufficiently deſtroyed in the Operation, or by future Applications.

BUT as the Inſtances are ſo common, where all Attempts to diſperſe them prove ineffectual, and the Parts become diſabled both from the Size and Situation of the Tumour, the Surgeon is at length obliged to have recourſe to the Knife, as a radical Cure.

I KNOW there are ſome who object to this Operation, on account of the Danger attending

a Wound of the ſubjacent Tendon, or Ligament; imagining that ſuch an Accident would probably be attended with the worſt of Conſequences. But this objection can be of no great weight, ſince it is always in the Power of a skilful and ſteady Operator to avoid this Accident, by cutting away only a Part of the Cyſt, and leaving the reſt behind to digeſt out with the future Dreſſings; which it will moſt certainly do, if the outward Wound be made ſufficiently large, as has been already moſt judiciouſly and fully explained by Mr. *Sharp*, in his Chapter of *encyſted Tumours*.

BUT ſuppoſing it ſhould happen that the Tendon, or Ligament, or both ſhould be wounded in the Operation, the Conſequence will not probably be ſo bad as is apprehended, ſince every Day's Experience proves, that accidental Wounds of theſe Parts are known to do well with proper Treatment; and, as ſome proof of the Validity of this *Hypotheſis*, the two following Caſes are related. In both of which it was found abſolutely neceſſary to divide a conſiderable Ligament, before the Operation could be properly and effectually performed.

A. M. 19 Years of Age, in the Year 1745, ſtrained her Wriſt by a fall. The Accident was immediately followed with great Pain, a Weakneſs, and Swelling of the whole Hand; which, notwithſtanding the proper Methods uſed for her Relief, continued much in the ſame State till 1749; when ſhe perceived a ſmall diſtinct Tumour to ariſe in the inner, and lower part of her Wriſt, which in a few Days increaſed to ſo great a Degree, as to render her incapable of ſhutting her Hand, or moving her Fingers.

ON the 21ſt of *April* 1750, ſhe applied to me. Upon Examination I diſcovered a Fluid in the Tumour which extended for about an Inch above the *Ligamentum tranſverſale carpi*, to about half an Inch below it, and upon Preſſure ſeemed to paſs underneath it.

I DETERMINED upon the Operation, which I performed in the following Manner. Her Hand being properly placed and ſecured upon a Table, covered with a double Blanket; I began my Inciſion a little above the upper Extent of the Tumour, and continued it to a little beyond its lower Extent, through the Integuments, which I carefully diſſected upon each ſide. This gave me an Opportunity of diſcovering

discovering its exact Situation, which I found to be under the Tendons of the *Flexor carpi ulnaris*, and *Palmaris longus Muscles*. Both of which were considerably lifted up, and removed from their natural Situation, by the subjacent Tumour. It likewise extended itself under the *Ligamentum transversale Carpi*, which there was a Necessity of dividing, before I could have an opportunity of dissecting the Tumour from its Basis. The upper Part of the Cyst was strongly attached to the inferior Parts of the Tendons of the *Flexor Carpi ulnaris*, and *Palmaris longus Muscles*. The lower Part of it adhered to the Tendons of the *Perforans* and *Perforatus Muscles*; from whence I fairly dissected the Whole away.

THE Contents of the Tumour were a Composition of a *gelatinous and steatomatous* Substance.

SHE continued in a good deal of Pain for four Days after the Operation; at the End of that time she grew easy, and so continued to the finishing of the Cure, which was perfected in six Weeks without any considerable Inflammation, or the least Abcess, and she was restored to the perfect Use of her Hand.

THE other Caſe was ſo like That I have juſt now deſcribed, that I look upon it as unneceſſary to give a particular Account of it.

THE Operation was performed in the ſame Manner, and the Cure was attended with no other Difference in its Progreſs than this, that the Patient had a ſmall Abſceſs which aroſe on the middle Part of the Fore-arm, which was opened by Inciſion, and did well, with very little trouble. The Uſe of the Hand was as perfectly recovered in this, as in the preceding Caſe.

CASE XVII.

Of a Ganglion ſituated upon the Fore-finger.

C. *P.* A very luſty Woman aged 50, ſome Years ago perceived a Swelling to ariſe upon the anterior Part of her Fore-finger, which at length increaſed to the Size of a Pigeon's Egg. It was now become ſo troubleſome from its Size and Situation, as to deprive her of the Uſe of her Finger, and to render it quite incapable of Motion.

IT

IT was not attended with much pain, but from the Circumſtance of its uſeleſſneſs, ſhe was deſirous of having it removed.

SHE had asked the Advice of ſeveral Surgeons who refuſed to undertake it.

AT length ſhe applied to me: I ſaw no objection to the Operation, and accordingly proceeded to the Extirpation of the Tumour.

ITS Contents were intirely *gelatinous*, and contained under the *Capſula* of the Tendons of the Flexor Muſcles of the Index, or Forefinger.

THERE was neither much difficulty, nor pain, in the Operation; and the Patient did well in a ſhort Time, without the leaſt Interruption or bad Symptom. She now enjoys the perfect Uſe of her Finger.

BUT notwithſtanding the favourable Circumſtances that attended theſe ſeveral Operations; I would not have it inferr'd from what I have ſaid, that Inflammations and Abſceſſes very rarely happen in Conſequence of the Operation. I confeſs, I have known them to occur ſeveral times, but I never knew an Inſtance of their terminating otherwiſe than well.

CASE XVIII.

Of an Empiema, *where the Operation was unſucceſsfully performed.*

NOVEMBER 1750, *S. K.* aged 37, in *May* laſt was ſuddenly ſeiz'd with a Pleuritick Pain in his right Side, attended with a Fever and difficulty in Breathing; for which he put himſelf under the Care of a neighbouring Apothecary, who bled him occaſionally, and at the ſame Time adminiſter'd ſuch Medicines and topical Applications to the Part as he thought proper, but without effect. He continued much in the ſame State, till *July* following; when he was admitted into the Hoſpital under the Care of the Phyſician, who preſcribed for him near four Months, but without much Benefit. On the firſt of *November* following, he was attacked with an uncommon difficulty of Breathing, and Pain in his right Side, for which he was blooded, this gave him ſome relief. On the Day following, I was conſulted; upon learning his Symptoms,

and

and upon inquiring into farther Particulars, I diſcovered the right Side of the *Thorax* to be ſomewhat larger than the Left, and the Integuments appear'd a little thicken'd, but without the leaſt Tendency to Diſcoloration, Softneſs, or any Appearance of a Fluctuation. He was incapable of lying on his left Side without ſuffering exceſſive Pain, which he deſcribed as extending from the Middle of the Breaſt-bone to the Back. This was perceivably attended with ſo great a difficulty of Breathing, as ſeem'd to threaten Suffocation. He could lie on his right Side without any conſiderable inconvenience, but he was moſt eaſy when lying on his Back; he never had been troubled with a Cough till within this laſt Month; nor had he ever perceived the leaſt Diſcharge of Matter, either by ſpitting, or otherwiſe. His Pulſe was quick and low, his Countenance pallid, he had no Appetite, and complained of great reſtleſſneſs. It is remarkable, that he never remembers to have had any Rigor, which is a Circumſtance that commonly attends the Formation of Matter. Upon the Appearance of the foregoing Symptoms, I thought proper to adviſe the Operation for the *Empiema*, which he readily aſſented to, and I performed it on the

Spot in the following Manner: When the Patient was properly ſituated and ſecured, I began by making an Inciſion of about two Inches and an half long with the Courſe of the Ribs, upon the Part where they form their greateſt convexity, and betwixt the ſixth and ſeventh Ribs, into the Cavity of the *Thorax*, from whence there iſſued three Pints of a thick fœtid Matter; from this Inſtant, he was greatly relieved. The Diſcharge was very conſiderable for the five firſt Days, when it began to decreaſe. From the Moment of the Operation, he was capable of lying on either ſide, or of ſitting upright without the leaſt inconvenience; and he continued to grow better till the firſt of *December* following, when his Diſcharge increaſed, and continued in great Quantities till his death, which happen'd in about ſeven Weeks after the Operation. Upon opening the Body, I found the *Diaphragm* deſtroy'd quite through, and the upper Part of the Liver had ſuffer'd greatly from the incumbent Matter. The Lungs lay looſe in the Cavity of the *Thorax*, and were not in the leaſt ulcerated, or apparently diſeaſed.

N. B. In the Operation, the Inciſion was made nearer to the ſuperior Edge of the lower Rib,

Rib, than to the inferior Edge of the Upper, which prevented the Risk of wounding the intercostal Artery.

CASE XIX.

Two Cases of the Operation for the Empiema *successfully perform'd and read before the* Royal Society *the* 19*th of* March 1752, *and* 28*th of* June 1753.

CASE I.

T. H. aged 27, was admitted into the Hospital on the 19th of *December* 1751, on account of a Pain in his right Side, and Cough, which he had labour'd under for three Weeks; he was immediately put under the Physicians Care, but notwithstanding all proper methods used for his Relief, his Disorder increased till the 13th of *January* following, when I was consulted.

UPON enquiry, I found him afflicted with the following Symptoms. A quick low Pulse, frequent Cough, and difficulty of Breathing, which last Symptom was greatly increased upon

lying on his left Side, or upon ſitting upright. He appeared greatly emaciated, his Countenance was very pallid, or ſallow. Upon further enquiry, I found the right Side of the *Thorax* ſomewhat enlarged; the Integuments were viſibly thicken'd, but without the leaſt Diſcoloration, or perceivable Fluctuation. However, being perſwaded from the foregoing Symptoms, that there probably was an extravaſated Fluid underneath; I adviſed the Operation which was conſented to, and I performed it upon the Spot in the following Manner.

THE Patient being conveniently ſeated, I made an Inciſion of about three Inches long with a Knife, between the tenth and eleventh Ribs, counting from above, and at about four Inches diſtance from the *Vertebræ*; the direction of the Inciſion was agreeable to the Courſe of the Ribs, and upon being made nearer to the ſuperior Edge of the eleventh Rib, than the inferior Edge of the tenth, the intercoſtal Artery by that means eſcaped being wounded; upon dividing the intercoſtal Muſcle, very near twenty Ounces of Matter were diſcharged. After this, I introduced my Finger through the Wound into the Cavity of the *Thorax*, but found

found no adheſion of the Lungs to the *Pleura*; from whence I am inclined to conjecture, that this Abſceſs was originally form'd in the cellular *Membrane* of the *Pleura*, and had at length made its way into the Cavity of the *Thorax*.

WHAT ſeems to corroborate this Conjecture is, that the violent Symptoms which happened upon lying on the ſound Side, or upon ſitting upright, did not occur till within a Week before his Application to me. From the Moment the Matter was diſcharged, he found very great Relief; his Reſpiration became quiet, his Fever and Cough gradually abated, till in about ſix Weeks he perfectly recovered, and was accordingly diſmiſs'd the Hoſpital. The Diſcharge from the Wound continued in conſiderable Quantities for the firſt Fortnight; during which time the Wound was kept properly open with Tents; but when the Diſcharge was no more than what might be expected from a ſuperficial Wound of the ſame Size, all Tents were diſcontinued, and ſuperficial Applications only made uſe of.

CASE

CASE XX.

On the 19th of March 1752, *I did myself the Honour of communicating to this Society the Case of* T. H. *on whom I had perform'd the Operation for the* Empiema *with Success. Since then I have perform'd the same Operation a second time with equal Benefit; and therefore presume to lay this Case likewise before you as a farther Proof of its usefulness under the like Circumstances.*

CASE 2.

J. C. aged 17 Years, was admitted into *Guy*'s Hospital on the 10th of *May* 1753, on account of a Complaint in his Chest which he had labour'd under for three or four Weeks.

His Symptoms were a continual Pain in his left Side, a difficulty in Breathing, and an inability of lying on his right Side, or of sitting upright, without greatly increasing his Complaints; his Pulse were quick and low, he had a short Cough, was a good deal emaciated, and appear'd sallow in his Complexion.

UPON

UPON Examination, I perceiv'd a ſmall Tumour ſituated on the anterior Part of the *Thorax*, obliquely on the left Side of the Extremity of the Sternum, or Breaſt-bone. There was not the leaſt Diſcoloration of the Integuments. Upon preſſing the Tumour his Pain, and difficulty of Breathing were encreaſed, and there appeared ſomething like a Fluctuation under my Fingers. He had never had any Rigor, which is a Symptom generally attending the Formation of Matter; but from Experience I have found, that the Want of this Symptom is no proof of the contrary.

FROM the foregoing Circumſtances and Symptoms, I made no doubt of the propriety of the Operation, which I perform'd in the following Manner.

THE Patient being properly ſituated and ſecured, I began with making an Inciſion of about two Inches long through the Integuments and tendinous Expanſion of the *oblique Muſcles* of the *Abdomen*, upon the moſt prominent Part of the Tumour; then I proceeded to the making a ſecond Inciſion of an equal length with the firſt, tranſverſely through the upper Part of the *Rectus Muſcle* (which had a perfect healthy Appearance) directing my Knife

Knife forward betwixt the *cartilaginous* Portions of the ſeventh and eighth Ribs, and the Extremity of the *Sternum*, into the Cavity of the *Thorax*; upon which, a thick clotted Matter was diſcharged, to the Quantity of twenty three Ounces and upwards.

As ſoon as the opening was made into the Cavity, and the Fluid began to be evacuated (which was by leaps) the Patient expreſs'd a painful and uncommon kind of Senſation, which he compar'd to a Weight being ſuddenly taken from his Heart. Hence, I conjecture that this part had ſuffer'd ſo great a Compreſſion, as to have been for ſome time incapable of performing its natural Actions, but, upon the Fluid being ſet at Liberty, the Ventricles of the Heart probably became immediately more dilated, than they had been for ſome time before, on account of the Weight they had ſuſtain'd. After the whole of the Matter was diſcharged, I introduced the Forefinger of my right Hand into the Cavity, with which I evidently felt the Lungs (quite looſe and free from Adheſion) the *Mediaſtinum* and ſuperior part of the *Diaphragm*, which laſt part had been preſs'd conſiderably lower than its natural Situation, by the Weight o

th

the incumbent Matter; from whence it undoubtedly appeared, that this great Quantity of Fluid had been contained in the *Thorax*. After the whole of the Matter was diſcharged, I introduced a Linen Tent, properly ſecured, into the Cavity, which was continued to be introduced every Day for about the Space of three Weeks, now and then, as occaſion required, making uſe of the prepared Sponge-Tent. The Diſcharge was conſiderable for the firſt Week, when it began to decreaſe gradually, till at the end of three Weeks there was no diſcharge at all. From this time ſuperficial Applications only were made uſe of; at the End of five Weeks, he was perfectly well in all reſpects, and had recover'd his former plumpneſs and healthy Appearance.

I MUST obſerve to you, that about two Years ago he receiv'd a violent Blow on his left Side by a Fall, for which he had little or no Care taken of him. He has ever ſince this Accident been affected with ſome Complaints in his Side at times, but not conconſtantly, nor have they ever been ſo bad as to prevent his acting in his buſineſs as a Sailor, till within a few Weeks before he applied to me.

RE-

REMARK.

FROM the Circumſtances, and Symptoms attending the three preceding Caſes, I think it could hardly be doubted what the Nature of the Diſeaſe was; and as the Lungs, *Diaphragm*, and *Intercoſtal Muſcles* muſt not only be impeded in their Actions, in proportion to the Quantity of extravaſated Fluid, which is confined in the Cavity of the *Thorax*, but muſt alſo be in great danger of Ulceration or Conſumption from the Quality, and Preſſure of the incumbent Matter; I look upon the Operation in all Caſes of this Kind, to be abſolutely and immediately adviſeable, and that it ſhould not be deferred in Expectation of the Fluid being abſorbed into the Circulation, and evacuated by Urine, by Stool, or by Spitting: Since it muſt be acknowledged, that the Inſtances are very rare where theſe Events have been ſucceſsfully brought about; and at the ſame time that the Inſtances are numerous, where Death has reinſued in conſequence of the Operation being deferr'd too long, or being totally neglected.

THE Operation for the *Empiema* is neither very difficult nor dangerous, and I conclude there can be no better Arguments advanced in

ſupport

ſupport of its ſafety and uſefulneſs, when undertaken in time, than the Succeſs that attended its performance in two of the three preceding Caſes; in which it has been already obſerved, that the Diſeaſes were only of a few Weeks ſtanding: in the third Inſtance, where it has been likewiſe already obſerved, that the Operation was not ſucceſsful; I think this want of Succeſs might, with ſome Reaſon, be attributed to the Injury which had been communicated to the *Diaphragm*, and ſuperior part of the Liver, in conſequence of the long Confinement and quality of the Fluid; or it may poſſibly happen, that the Matter had been originally formed in one or both of theſe parts, and diſcharged itſelf into the Cavity of the *Thorax*; which, for want of being evacuated in time, had at length increaſed the Diſeaſe, and deſtroyed the Patient by the Largeneſs of the Ulceration, and Quantity of the Diſcharge.

CASE

CASE XXI.

Of an incarcerated Hernia Inguinalis.

A. B. about 30 Years of Age, in the Year 1748-9, was brought into the Hoſpital with an *Hernia Inguinalis*, which he had been ſubject to for many Years without ever wearing a Truſs. It had been down for ten Days attended with exceſſive pain, without being once return'd, or any means uſed to relieve him. His Symptoms were a low languid Pulſe, frequent reachings to Vomit, and Hiccoughs. The Tumour was ſtill exceedingly tenſe, for which reaſon it was judged adviſable to proceed immediately to the Operation. The Contents were a Part of the *Inteſtinum Ileum* and *Omentum*, both exceedingly inflamed, and the latter tending to Mortification. They adhered to each other, and the *Omentum* to the *Sac* formed by the *Peritoneum*, which was become thicker than a Crown piece, and ſeemed quite diſtinct from the *Tunica Vaginalis*, upon which it lay. The *Sac* as well as the diſeaſed

Part

Part of the *Omentum* were cut off, without making any Ligature upon either of them. The Inteſtine and ſound part of the *Omentum* were returned into the *Abdomen*, and two ſtitches were made through the Integuments, after having firſt dilated the Rings of the *oblique Muſcles* upwards and outwards with a Pair of probe Sciſſars. Soon after the Operation, a Clyſter was adminiſter'd, by which means two or three Stools were procured, and the Patient grew tolerably eaſy. The ſecond Day after the Operation, the whole *Abdomen* became prodigiouſly enlarged and tenſe; but in a few Days afterwards it ſubſided, by the help of Fomentations and Clyſters, and the Patient went on ſeemingly well to the eighteenth Day; when on a ſudden he became very reſtleſs, a violent Looſeneſs, attended with *delirium*, enſued, and he expired about forty eight Hours after this Attack. Upon opening the Body, I found the Inteſtines in general greatly inflamed, the *Ileum* was mortified in many places, and ſeveral Abceſſes were form'd in the Meſentery.

Query. Is it not probable, tha t the bad Symptoms, ſuch as Inflammation, Tenſion, *&c.* ceaſed a few Days after the Operation; and

that the Fever, attended with Inflammation, which came on afterwards, was merely accidental, and not at all the Effect of the Operation? Since it is very certain that all Inflammations of the Bowels, terminating in Mortification, are very ſpeedy, and admit of no great Intermiſſion in their Progreſs.

CASE XXII.

Of an Hernia Umbilicalis *from Tapping.*

NOTWITHSTANDING it ſeldom happens that an *Hernia* is form'd in conſequence of opening the Integuments at the Navel, in order to evacuate the Water contained in the *Abdomen*, in that Species of Dropſy call'd *Aſcites*; yet there have been undoubted Inſtances, where this Species of Rupture has ariſen merely from this Cauſe, and been attended with ſuch Circumſtances as made it neceſſary to perform the Operation for the *Hernia Umbilicalis*. It appears that the opening made through the *Peritoneum*, tho' very ſmall, is nevertheleſs capable of being ſo enlarged

enlarged from the Stream of Water in the time of its Evacuation, or from Preſſure of the Inteſtines againſt the internal Part of that *Membrane*, grown greatly diſtended and flaccid from the Quantity and Nature of the Contents, as to make it incapable of reſiſt the Force it ſometimes meets with in Coughing, Sneezing, *&c.*

A. B. was admitted into the Hoſpital with an Aſcites or Dropſy of the *Abdomen*, which was become ſo diſtended by the Water, as to render him incapable of lying down without bringing on ſuch a difficulty of Breathing as threaten'd ſuffocation (from the Compreſſion, probably, which the *Diaphragm* and Lungs labour'd under in this Situation) for theſe Reaſons it was judged neceſſary to Tap him. Upon Examination, his Navel appeared *protuberant*, and puſhed forward as large as an Egg. Its Integuments were thin, and almoſt tranſparent. Upon my conſidering that an opening made through this part would be ſufficient to evacuate all the Water; and having ſeveral times performed the ſame Operation (agreeable to the Advice of the Moderns) without incurring the leaſt inconvenience, I did not at all heſitate at the

Propriety of repeating it, which I did in the following Manner.

THE Patient being ſeated in a Chair of a convenient Heighth, and his Hands properly placed acroſs the upper Part of the *Abdomen*, at the ſame Time having an Aſſiſtant to preſs on each ſide of it, I plunged the Point of a common Lancet into the Navel on its moſt protuberant part, and by this means diſcharged the Whole of the Fluid without farther trouble: After this, a Flannel Compreſs, dipt in Spirits, was applied upon a Plaiſter that was firſt put to the Wound, which was ſecured on by a long Flannel Roller, and the Patient removed to Bed. He appeared as well as could be wiſh'd for ſeveral Days, but at length complain'd of exceſſive pain in the Navel, which appear'd ſwell'd and inflamed, attended with frequent reachings to Vomit and Fever (the conſtant Symptoms of an incarcerated *Hernia*) I endeavoured to relieve him by Fomentations, Clyſters, *&c.* but his Pains remaining intolerable, and being incapable of aſſiſting him by any other means. I proceeded to the Operation, which I performed in the following Manner.

THE

THE Patient being removed from his Bed and laid ſupinely upon a Table of a convenient Height, cover'd over with a double Blanket, I placed a Pillow under his Shoulders, by which means the *Abdomen* became relax'd; his Legs at the ſame Time hanging down from the Sides of the Table, were properly ſecured by two Aſſiſtants. After this, I began with making an Inciſion, with a round edged Knife, at the upper Extent of the Tumour; continuing it in a ſtraight Direction downwards, a little beyond its lower Extent, carefully through the Integuments: Upon which, I diſcover'd a Portion of the *Inteſtinum Ileum* without any of the *Omentum*; the *Inteſtine* was greatly inflamed. When I had proceeded thus far, I introduced the Fore-finger of my left Hand through the Wound into the Cavity of the *Abdomen*, with which I gently compreſs'd the *Itenſtine*, and then proceeded to enlarge the Wound with the ſame Knife, which I introduced upon my Fore-finger. This gave me an opportunity of returning the *Inteſtine* without Difficulty. It appear'd quite looſe, and free from adheſion. When the Inteſtine was thus return'd, I made one Ligature acroſs the Wound, by paſſing a crooked

Needle through the Integuments only, at about a Quarter of an Inch from the Edge of the Lips of the Wound: but the *Abdomen* appearing conſiderably diſtended in two Days after the Operation, and the Patient complaining of great uneaſineſs from the Ligature, I immediately cut it away, which relieved him; but the Symptoms of his Vomiting, *&c.* ſtill continued, and he expired in a few Days afterwards.

Query. Is it not probable, that if the Operation of the *Paracenteſis* had been perform'd on the left Side of the *Abdomen*, obliquely below the Navel, half way betwixt that and the Spine of the *Os Ileum*, that the Patient might have lived for ſome time, as is very common in Caſes of this Kind; and is it not more than probable that his ſpeedy Death was brought on by the ſtrangulated *Inteſtine*? If this is allow'd, it may be inferr'd from the preceding Caſe, that the Operation cannot be ſaid to be entirely free from that Danger, which may always be avoided by tapping with the Trocar, in that part of the *Abdomen*, I've juſt now deſcribed. Though I muſt own this Accident is not likely to occur often, ſince this is the only Inſtance of the

the Kind I have ever ſeen, which aroſe from the like Cauſe.

CASE XXIII.

Of a Wound Penetrating the Abdomen.

J. W. aged 22, was ſtabb'd with a Horſe-Picker on *Wedneſday* the 22d of *November*, 1748, about three Inches a little obliquely on the right Side, below the Navel. He bled very little at firſt; about an Inch of the ſmall *Inteſtine* puſh'd out at the Orifice, which was return'd by a Surgeon, and the Wound ſew'd up.

THE Wound continued diſcharging Blood in ſmall Quantities till the *Sunday* following, when his Fever increas'd, and a large Quantity (as nearly as could be gueſs'd about a Pint) of blackiſh curdled Blood, burſt out at the Orifice; the Ligature burſt open the following Week.

THE Fever continued with Vomitings, accompanied with a Tenſion of the Whole *Abdomen*, which was particularly hard and tumified, in the Neighbourhood of the Orifice.

IN this circumſtance, I had thoughts of dilating the *Abdomen*, in order to evacuate the extravaſated Blood; but the *Sunday* following it diſcharged itſelf in a larger Quantity than before, and continued to diſcharge very greatly for ſome Days, when at laſt it began to diminiſh; all the bad Symptoms (Vomiting, Purging, Fever, loſs of Appetite, *&c.*) by degrees abating, and in proceſs of time the Diſcharge was purulent, but conſiderable in quantity. However, it healed without any further Inciſion, and was well the 17th of *January* following.

Query. Is it not reaſonable to imagine, from the Circumſtances attending this Caſe, that the Violence of the Symptoms aroſe from the extravaſated Fluid being confined in the Cavity, and from the Inflammation conſequent, upon the Needle and Ligature being paſs'd through the *Peritoneum* and tendinous expanſions of the *tranſverſe Muſcles?*

IT is probable, that if a free Diſcharge of the Blood could have been procured from the Beginning (which might poſſibly have been effected by leaving a depending Orifice) theſe Symptoms might have been prevented. So that in all Wounds penetrating the Cavity

of

of the *Abdomen*, we ſhould only make uſe of the Suture, where the Inteſtines are incapable of being retained in their proper Situation without it; at the ſame Time having a Regard to a depending Orifice for the Diſcharge ariſing from the divided Veſſels.

CASE XXIV.

A ſingular Caſe of the Stone.

IT is a Maxim laid down by the moſt experienced Writers in Surgery, that when a Stone, taken out of the Bladder, is found to be rough on its Surface, it amounts to a Proof of there being no other remaining behind. But notwithſtanding it is confirm'd by Experience, that this Obſervation is generally well grounded, yet there are Inſtances which prove this Rule to be not altogether without exception.

FOR which reaſon it is adviſeable not to be determined abſolutely from appearances only, but to be farther ſatisfied during the Operation by introducing the Fore-finger, or a Female Catheter through the Wound into the Bladder;

Bladder; which may always be done withou giving much Pain to the Patient, or any grea trouble to the Operator; and is doubtle the beſt way of being ſatisfied in a fact o ſo great Importance.

SINCE I have had the Opportunities o making the two following Obſervations; can't help conjecturing, that there have bee ſome Inſtances of a Stone, or Stones, been lef behind in the Bladder, merely from having to great a Confidence in this general Rule at th time of Operating; which Opinion I am le into, from having ſometimes known Patient relapſe into the ſame Diſorder, in a few Months or Weeks after the healing of thei Wounds, and to require a ſecond Operation When the Stone, upon being extracted, ha appeared of ſo conſiderable a Size, as to mak it probable, that it muſt have been of muc longer growth than the ſhort Time betwee the two Operations could admit of.

IN *October* 1753, I cut a Boy of 14 Year of Age, from whom I extracted a rough Ston of the Size of a Pigeon's Egg. After which, introduced my Fore-finger through the Wound into the Bladder, and diſcover'd a ſecond rough Stone, nearly of the Size with th former.

former, which I likewiſe extracted, and the Patient recovered without any occurrences worthy of communication.

REMARK.

IN a few Days after the Operation, it commonly happens that ſome of the Urine paſſes through the *Urethra*, and continues to do ſo without interruption, till the Whole of it finds its way through this Channel, and till the Wound is healed; but I have ſometimes obſerved, that at the End of ſeveral Weeks, the Urine ſtill continues to flow in great Quantities through the Wound, and endangers a Fiſtula, or at leaſt greatly retards the healing of the Wound. In ſuch Caſes, I have often introduced a Bougie through the *Urethra* into the Bladder, with advantage. This, by equally diſtending the Paſſage, and preſſing upon the internal Part of the Wound, has in a few Days diverted the Courſe of the Urine, and diſpoſed the Parts to heal more evenly and expeditiouſly, than they otherwiſe would have done.

N. B. The Reaſon that induced me to be particularly circumſpect in the Caſe I have juſt now ſpoken of, aroſe from the following Accident.

IN

IN *December* 1752, I saw ten rough Stones presented to the Royal Society, which were taken out of the Bladder of an old Man; the largest of which weighed eight Ounces and an half, the others were small; these Stones were taken out of the Bladder after the Patient's Death.

SINCE then it appears, from the preceding Accounts, that two Instances have occur'd in so short a Time, which prove Exceptions to the general Rule laid down by almost all Writers, I was induced to offer these Histories to prove the Possibility of the like *Phænomenon* happening again.

CASE XXV.

Of a Piece of Bone, together with a Stone in the Bladder, successfully extracted: inserted in the Philosophical Transactions, *printed* Anno. 1753.

THE Stone in the Bladder is a disease common to both Sexes, and the Symptoms and Circumstances attending it, are in general so much alike and so well known, as to render few Cases of this kind worthy of particular Notice;

Notice ; but as the following is attended with a very ſingular, and perhaps unparallell'd Circumſtance, I am induced, merely on this account, to give a ſhort Hiſtory of the following Fact.

M. E. aged 48, (in all other reſpects an healthy Woman) had been afflicted with the Symptoms of the Stone in the Bladder for about two Years, for which ſhe put herſelf under my Care. After having prepared her in the uſual Manner, I proceeded to the Operation, but in a Method ſomewhat different from that generally practiſed, which is effected merely by a forcible Dilatation, and conſequent Laceration of the *Urethra* ; but having almoſt always obſerved an incontinence of Urine, in conſequence of this Method of Operating, for this Reaſon, and from the Succeſs which I had ſome time ago met with in the Caſe of *M. B.* mentioned hereafter, from whom I had extracted an Excreſcence that was growing on the Inſide of the Bladder ; I differ'd from the uſual Method of Operating, and cut the *Urethra* obliquely upwards on the right Side to about half its length, which I eaſily effected by introducing a ſmall Knife into the Groove of the Staff, and found very little force requiſite

requiſite to the Introduction of the Gorget and Forceps into the Bladder, and in the Extraction of the Stone, and piece of Bone.

UPON laying hold of the Stone, it broke ſo that only a Part of it, of the Size of a Pigeon's Egg, was extracted upon the firſt Introduction of the Forceps into the Bladder; upon introducing the Forceps a ſecond time, I extracted a ragged and irregular piece of Bone weighing ſixteen Grains, which I have now in my Cuſtody.

BEFORE the Bone was waſhed and cleanſed its Cavities appear'd filled, and covered with a Mixture of hairy and ſtoney Particles; from whence I conjecture, that it probably was the *Nucleus* of the Stone.

NOTHING remarkable occur'd during the Cure, but that the Patient ever ſince the ſecond Day after the Operation, was capable of retaining her Urine, and recover'd perfectly in leſs than three Weeks after the Operation was perform'd.

SINCE the Performance of the preceding Operations, I have always follow'd the ſame Method of dividing a Part of the *Urethra* in Females, previous to the Introduction of the Gorget, *&c.* and have found it to be much

nuch more eaſy to the Patient, leſs troubleſome o the Operator, and more ſucceſsful, than vhen perform'd by a forcible Dilatation of he *Urethra* without Inciſion.

CASE XXVI.

Of a Retention of Urine occaſioned by the Size of the Hymen.

IT has been obſerved by many Writers, that a ſtraitened Prepuce in Males penetrated by ſo ſmall a Hole, as to prevent a free Diſcharge of the Urine, convey'd in a full Stream through the *Urethra*, is often productive of ſuch Symptoms, as are ſimilar to thoſe ariſing from a Stone in the Bladder; which are probably occaſion'd by a Diſtention of the Prepuce, and an irritation of its internal Part, and the Glans. The Removal of theſe Complaints depends upon a longitudinal Diviſion of the Prepuce, or a Circumciſion of its Extremity, by which means a free Iſſue is procured to the Urine. But I don't remember to have read any Obſervation of a Diſeaſe of the like Kind happening to Females, and producing

producing the ſame Symptoms, from a preter-natural Formation of their Parts.

IN the Year 1749, I was conſulted in the Caſe of a little Girl about three Years old who had labour'd under ſuch violent Symptoms in voiding her Urine ever ſince her birth as to make it ſuſpected by her Phyſician, that ſhe had a Stone in her Bladder. Upon enquiry, I was inform'd that her Urine came away by drops, that ſhe was inclined to put her Hand to the *Pudendum*, when ſhe made Water, and that ſhe could not help crying and ſtamping with her Feet, merely from the Pain. Theſe Symptoms ſo nearly reſembled thoſe of the Stone, that I thought proper to propoſe the paſſing a Staff into the Bladder, that we might be ſatisfied whether there was a Stone, or any other Diſeaſe of the *Urethra*, or Bladder; but upon endeavouring to do it, I obſerv'd the *Urethra* was at leaſt half cover'd over with a Continuation of the *Hymen*, which appear'd imperforated; for this reaſon I could with difficulty execute my Deſign. However, I effected the Introduction of the Inſtrument into the Bladder, without uſing much violence, but there was no Stone, or any other præternatural appearance to be felt in

in that, or its Paſſage. Seeing this, I gave my Opinion, that the Difficulties and Pains which ariſe in diſcharging the Urine, probably proceeded from the Size and Situation of this *Membrane*; which I recommended as neceſſary to be divided. It was comply'd with; and I accordingly proceeded in the following Manner. The Infant being placed upon her Back, and properly confined upon a Table of a convenient Height, in the ſame Manner as is done in the Operation for the Stone; I divided the *Membrane* with a ſmall Knife by making a longitudinal Inciſion, and the Patient was cured in a few Days, by Anointing the Parts with Sweet Oyl, aſſiſted with an emollient Fomentation.

REMARK.

IF the Circumſtances of a Difficulty in making Water had not occur'd, ſo as to have made it neceſſary for the Parents to ſeek for Relief during this Infant State, it muſt have happen'd; that at the Time of puberty, the Menſes could not have been voided, ſo that the Surgeon muſt have been then obliged to have divided this *Membrane*, to have given Iſſue to what muſt have been otherwiſe confined; as has been known to have been ſome-

times the Caſe, where this *Membrane* has been found imperforated in Adultneſs.

CASE XXVII.

Of an Amputation of the Penis.

T. C. aged 63, about four Months ago perceived a ſmall Pimple to ariſe upon the *Glans Penis*, which continued without pain for ſix Weeks. At the end of which Time, it grew painful, and increaſed in ſize, which obliged him to apply to a neighbouring Surgeon for relief. The firſt Applications made uſe of to the Part, were *emollient Cataplaſms*, which were continued for a Fortnight, but without any other effect than keeping the Part eaſy, and preventing an increaſe of the Symtoms. Seeing this, he was induced to apply a *Cauſtic* to the Excreſcence, which brought on exceſſive pain, and produced an Ulceration; and from that time, the Tumour began to grow conſiderably worſe.

ON the 3d of *Auguſt* 1749, he was admitted into the Hoſpital. Upon examination the

the whole *Penis* was found cancerous, and conſiderably enlarged, to within about an Inch and a half of the *Abdomen*, attended with exceſſive pain.

IT had for the laſt four Weeks diſcharged ſo greatly, as to weaken him conſiderably, and had bled at times, but not very profuſely. On the ſeventh Inſtant, it was amputated near the *Abdomen*, in the following Manner.

A TOURNIQUET was applied on the *Penis*, as near the *Abdomen* as poſſible, and an Inciſion was made firſt through the Integuments only, which were drawn back, and then a ſecond Inciſion was made as near as poſſible to the Integuments through the *Corpora cavernoſa*; there was no Inſtrument introduced into the *Urethra*, nor was there much difficulty in ſtopping the *Hæmorrhage*, which was effected by the Needle and Ligature.

A FEW Hours after the Operation, he urin'd freely, and from this time continued to go on very well, till he recover'd. But in a few Months afterwards, he relaps'd into the ſame diſorder, and died.

A SIMILAR Caſe to this is mentioned by *Ruyſch*, in his 30th *Obſervation*; but there the Operation is deſcribed as being perform'd

in a very different Manner, as follows: A Catheter was introduced through the *Urethra* into the Bladder, and confined by a proper Ligature from ſlipping out; after this, a Ligature was made very tight upon the *Penis* above the diſeaſed Part; the next Day, a ſecond Ligature was applied upon the firſt, and in five Days after, the *Penis* was amputated with a Knife in the ſame Part, which had been almoſt wore through by the Ligatures.

THIS method was made uſe of, in order to prevent an *Hæmorrhage*; for he obſerves, that by this means, the Part became almoſt mortified off, and no bleeding enſued. But as this method muſt be infinitely more painful than what attends the Operation, when perform'd by Inciſion only, I think there can be no doubt, which of the two is preferable. Mr. *Ruyſch* obſerves, that the Patient did well, and continued ſo. He ſays, that part of the *Penis* which was left behind, drew quite back into the *Abdomen*, ſo that he was obliged to make uſe of an Ivory Pipe, which was occaſionally introduced through the *Urethra* into the Bladder, to prevent the Inconvenience of being wetted by the Urine.

RE-

REMARK.

IT is worth obſerving, what different Effects were produced by the Emollient, and Cauſtic Applications in the preceding Caſe. The Firſt it appears, kept the Parts eaſy, and prevented the Diſeaſe from increaſing, though it had no farther tendency to the Cure of the Wound. But the Latter, which was painful, immediately aggravated the Symptoms, and conſiderably increaſed the Inflammation and Ulceration. This Caſe is one of the many, which ſhews the Impropriety of all painful Applications to Ulcers that are attended with the like Malignancy; and at the ſame time the great Advantages of ſuch as are emollient and relaxing.

FROM the Event of *Ruyſch*'s Caſe, we may learn the Poſſibility of Succeſs after the like Operation; though it muſt be acknowledged, that the Inſtances are rare where the Patient does not relapſe into the ſame Diſeaſe.

CASE XXVIII.

Of the good Effect of medicated Bougies, in diſeaſes of the Penis *and* Scrotum.

P. *E.* in *Auguſt* 1731, contracted a Clap, which he neglected till the *March* following, when there appeared a Swelling in the *Scrotum*, which ſuppurated, and was open'd by Inciſion. He was at the ſame time put under a Courſe of Phyſick; but notwithwithſtanding this Treatment, there appear'd a ſecond Swelling on his *Scrotum* ſoon afterwards, which ſuppurated, and was likewiſe open'd; his Urine iſſued through the Wound, and continued to do ſo for four Months, when it healed up.

HE had a purulent Diſcharge from the *Penis* the whole Time, attended with frequent Inclinations to Urine, which came away ſometimes by drops, at other times in a ſmall twiſted Stream tinged with blood, and attended with exceſſive Pain. He remain'd pretty nearly in this State, till *Auguſt* 1747, when he perceived a Swelling to ariſe in *Perinæo*,

rinæo, which obliged him to apply for further advice. The Tumour ſuppurated, and was open'd by Inciſion, and the Patient ſalivated. But notwithſtanding all proper care having been taken of the Wound, it remain'd fiſtulous.

HE was admitted into the Hoſpital, the firſt of *December* 1748. Upon examination, I diſcover'd two Fiſtulas in *Perinæo*, and two more in the *Scrotum*, through which the greateſt Part of his Urine was diſcharged. The *Scrotum* was enlarg'd to four times its ſize, and appear'd anaſarcous.

THE whole *Penis* was diſtorted, and its Integuments extreamly thicken'd. Upon introducing a Probe into the *Urethra*, I diſcovered an obſtruction about an Inch and half diſtant from its hither extremity, which I could not break through. The Day following, I introduced a medicated Candle, which was kept for ſome Hours in contact with the Obſtruction; it produced a conſiderable Diſcharge of Matter; the Bougie was continued for ſome Hours every Day for about a Week, when the Obſtruction gave way. A little farther up the *Urethra*, there was a ſecond Obſtruction, which was removed in a few Days by the ſame means. After having

ſurmounted theſe two difficulties, I met with a third near the Entrance into the Bladder, which was made to diſappear by the ſame Application in ten, or twelve Days; ſo that I could now introduce a ſmall Bougie quite into the Bladder. The Bougies firſt uſed were very ſmall, not larger than a common knitting Needle; but their ſizes were gradually increaſed, till I could eaſily introduce thoſe of the Size of a Gooſe-quill.

FROM the Time I got into the Bladder, the Fiſtulas grew better, the Tumour of the *Scrotum* ſubſided gradually, till in about five Months he was perfectly cured, and the Parts appear'd in their natural State. The Swelling of the *Scrotum* was form'd in conſequence of the Urine having inſinuated itſelf into the *cellular Membrane*. I ſaw him two Years after his cure, he was then perfectly well, and had not perceived the leaſt return of his Diſorder. Before he left the Hoſpital, he could Urine in as full, and large a Stream, as though he had never been diſeaſed, and was well in every other reſpect.

THE Inference I would draw from the preceding Caſe, is to prove the great uſefulneſs of Mr. *Daran*'s Method of treating theſe Diſ-

Diſeaſes, and at the ſame time to ſhew, that it is undoubtedly true, as has been already obſerved by Mr. *Sharp*, in his *Critical Enquiry*, that whatever Applications will produce a Diſcharge, muſt probably be attended with nearly the ſame Succeſs, if continued a proper time. The Compoſition of the Bougies made uſe of in this extraordinary Caſe, was, one Ounce of old *Diachylon*, and two Drachms of *Mucilage* Plaiſter, ſlowly melted together; to which was added a Drachm and half of white *Precipitate*, which being ſtirred together, and afterwards ſpread upon Rag, was cut into ſlips, and rolled up in a conical Form for uſe.

I HAVE ſeveral times ſince made uſe of the ſame Plaiſter, with an addition of one Drachm and half, or two Drachms of *Calomel*, or red *Precipitate* finely lævigated and ſtirr'd into it, with equal benefit, in a Variety of Caſes; and could never diſcover any material Difference, either in their Efficacy, or manner of Operating.

CASE

CASE XXIX.

Of an Hydrocele.

J. M. aged 63, in the Year 1749, about eight Months before he applied to me, received a Blow upon the *Scrotum*, which in a few Weeks afterwards began to ſwell, and continued to increaſe from this time without pain, till the 27th of *September* of this Year, when he was admitted into the Hoſpital. The Diſorder appear'd to be an *Hydrocele*, or Dropſy of the *Tunica Vaginalis*, which upon being tap'd diſcharged about ten Ounces of a clear Water. About a Week after the Operation, the Water had collected nearly to as great a Quantity as before; upon which, I perform'd the Operation a ſecond Time. After the whole of the Water was evacuated, I introduced a ſmall Spunge tent into the Orifice, which was continued for twenty four Hours without producing any pain, or viſible effect. Seeing this, I renewed the Introduction of the Tent, which remained in till the third Day. During this time,

time, there was no Diſcharge at all. Upon Examination, the *Scrotum* began to appear ſomewhat harden'd and inflamed; on which account the Tent was omitted, and a Pultice of Bread and Milk applied to the Part. On the fourth Day, a ſmall quantity of Matter oozed through the Orifice, which increaſed conſiderably for about ten Days, when there appeared a ſmall Abceſs on one ſide of the Orifice, which, upon being open'd, diſcharged about an Ounce of Matter; from this time, the Diſcharge became trifling, till it was quite well, which was in four or five Days afterwards. The Coats of the Teſticle, and Teſticle itſelf, form'd an Adheſion with each other. It is obſervable, that the Pain and Fever which attended the Cure were ſo trifling, as render'd it unneceſſary for the Patient to keep his Bed longer than two Days; which, in all probability, was owing to the gentle and gradual Action of the Tent upon the *Tunica Vaginalis*.

FROM the Succeſs which attended this method of Operating in the preceding Inſtance, I have been induced to perform it ſeveral times ſince in the ſame Manner upon other ſubjects,

ſubjects; moſt of which Operations have been attended with equal Lenity and Benefit.

CASE XXX.

Of a Tumour growing on the Inſide of the Bladder, ſucceſsfully extirpated; inſerted in the Philoſoph. Tranſact. *for the Months of* April, May, June, *and* July 1750, *printed* Anno. 1751.

AN Excreſcence, or Tumour ariſing from the internal Coat of the Bladder, is a Diſeaſe, though not very common, yet ſufficiently known to the curious in Phyſick and Surgery. But I believe that hitherto, no one has attempted the Cure of this Diſorder by Extirpation.

NOR indeed can it be ſuppos'd that the Inſtances are frequent, where the Operation is practicable: But as it is notorious from the Hiſtory of Phyſick, and Surgery, that ſeveral diſorders which were formerly unobſerv'd, have been found to occur frequently, after their Nature has been once diſcover'd and exactly deſcribed, I flatter myſelf, the Publication

lication of this Account, may poſſibly throw ſome light on the preſent Subject.

M. B. aged 23, on the 24th of *June* 1747, ſtrained herſelf, by endeavouring to lift a great Weight; ſhe was immediately ſeiz'd with a Pain in the ſmall of her Back, and a total Suppreſſion of Urine; which Symptoms, notwithſtanding the ſeveral Methods uſed for her Relief, continued till the 29th of the ſame Month; when an eminent Phyſician, and Man-midwife was called to her Aſſiſtance, who drew off her Urine with the Catheter.

DURING the Suppreſſion, ſhe was ſeiz'd with an acute Fever, and for eighteen, or twenty Hours before her Urine was drawn off, ſhe diſcharged by the Mouth a great Quantity of ſaltiſh Water tinged with Blood; which, upon lying down, flow'd in ſo great Quantities as to threaten Suffocation.

IN *April* 1750, ſhe applied to me. Upon enquiry, I learnt ſhe never had been able, from the Moment of the Accident, to void a Drop of Urine without the Aſſiſtance of the Catheter, which had been ever ſince made uſe of two or three times every twenty-four Hours; that ſhe was in continual pain, and had lately been much weakened, by having

ſeveral

ſeveral times loſt conſiderable quantities of Blood, occaſion'd by the Force made uſe of, for the Introduction of that Inſtrument into the Bladder. Upon examining her with my Fore-finger, which I introduc'd with great difficulty through the *Meatus Urinarius*, I diſcovered a conſiderable Tumour, which ſeem'd to be of a fleſhy Subſtance, and took its riſe from the lower Part of the Bladder near its Neck; the Extent of which I could with difficulty reach. I obſerv'd it to protrude a little Way out of the *Meatus Urinarius*, upon ſtraining to make Water when the Bladder was full; but upon ceaſing to ſtrain, it preſently return'd.

IT had preſerv'd pretty nearly the ſame Appearance ever ſince it was firſt taken notice of; and about eighteen Months ago, a ſmall Inciſion was made into it by a Surgeon, on preſumption of its containing a Fluid, but without any effect.

HAVING firſt prepared her, as before the Operation for the Stone, that is, by giving a gentle Purge on the Day preceding the Operation, and an emollient purgative Clyſter a few Hours before I operated, the *Rectum* by this means became emptied, and conſequently did did not make ſo great a Degree of Preſſure upon

upon the inferior Part, and neck of the Bladder, as it would otherwiſe have done; which gave me an opportunity of executing my deſign with much leſs difficulty, than I ſhould probably have met with in the Performance of the Operation, had I attempted it without this preparation.

WHEN this was done, I proceeded to the Extirpation of the Tumour, which I effected in the following Manner.

WHEN her Bladder was full, I order'd her to ſtrain, as though ſhe was going to make Water; upon which, I perceived the Tumour to protrude a little, this, I effectually ſecured from returning into the Bladder, by the help of a crooked Needle and Ligature, which I paſſed through the Tumour in different Directions, and endeavoured to draw it out through the *Meatus Urinarius*, but could not effect it by reaſon of its largeneſs.

SEEING this, I dilated the *Meatus Urinarius* on the right Side, by cutting it upwards about half way towards the Neck of the Bladder; when, by pulling the Tumour forwards, I had ſufficient room for tying it with a Ligature paſſed round its Baſis, which was very large.

FOR

FOR the three first Days after the Operation, she complained of a good deal of Pain in the *Abdomen*.

ON the sixth Day after the Ligature was made, the Tumour dropt off.

FROM the first Day of the Operation, she voided her Urine without any assistance, and is now perfectly well in every respect.

THE Size of the Tumour was nearly equal to a Turkey's Egg, and something like to it in Shape.

CASE XXXI.

A remarkable Instance of two Excrescences of the Urethra, *successfully extirpated.*

THE urinary Passages of Females, as well as Males, are incident to some Disorders, which are not to be cured, or reliev'd but by surgical Operations. These Disorders in Males proceed from various Causes, which are generally to be accounted for from a previous venereal Affection, or the frequent Passage of gravelly, or stony Particles through the

Urethra

Urethra, though it is certain that they ſometimes happen without any accountable cauſe.

IT ſeems to have been a Matter of Diſpute amongſt Surgeons, whether theſe maladies ariſe from Excreſcences, Caruncles, Contractions of the *Fibres* of the *Urethra*, Calloſities proceeding from veneral cauſes, callous Ulcers of the *Lacunæ* of the *Urethra*, or Affections of the proſtate Gland, or the reſt of the mucous Glands of the *Urethra*. But it is a Matter of no very great Conſequence, what the exact Nature of the Diſeaſe may be, ſeeing the Cure depends entirely upon the removal of the Obſtruction, and it is probable from obſerving, that as other parts of the Body are liable to theſe ſeveral appearances, this part is ſo too; and though it has been aſſerted by many, that there is no ſuch diſeaſe as a fungous Excreſcence in the *Urethra* of Males, owing to the Difficulty of diſcovering ſuch appearances after Death, yet from the Analogy there is ſubſiſting betwixt the Structure of the internal Part of the *Urethra* of Males and Females, I am inclined to think, that the Exiſtence of this fungous Appearance in them can hardly be doubted; and that a very trifling Diſeaſe of this Kind, is

capable of producing the moſt excruciating Pains may be concluded from the Hiſtory of the following Caſe, the Cure of which immediately depended upon the Removal of a Fungus of ſo inconſiderable a Size and Appearance, as would not have been regarded in many other parts of the Body. But as the ſame Operation cannot be undertaken in Males with an equal probability of Succeſs from the difficulty of knowing the exact Situation and Nature of the Diſeaſe, as well as from the different Length of the *Urethra* itſelf; we are oblig'd to have recourſe to ſuch methods as operate more ſlowly, and not with ſo great a degree of certainty.

E. C. a Virgin aged 27, had been afflicted, as I was inform'd by herſelf, and her Mother, with a Diſeaſe in the urinary Parts, ever ſince ſhe was four Years old. The Symptoms under which ſhe had laboured from the Beginning, were frequent inclinations to make Water, which ſhe voided by drops, and with exceſſive pain.

SHE had never been quite free from theſe complaints ever ſince her firſt attack, but was particularly ill at the Times of having her Menſes. Theſe diſcharges were in general regular,

regular, both as to time and quantity; when it happened otherwiſe, her complaints were greatly encreas'd, eſpecially at the very Time when ſhe expected a Return of them. The Pain and Irritations had been frequently ſo great, as to occaſion Convulſions; and ſhe had been always incapable of getting her livelyhood at Service.

SHE had try'd various methods for her relief, without receiving the leaſt Benefit.

IN *January* 1754, I was deſired to attend her.

UPON enquiry, I learnt that her complaints had been from the Beginning in the *Urethra*, and neighbouring Parts. I carefully examined into the *Meatus Urinarius*, by introducing a female Catheter, with which I dilated it by inclining the Inſtrument to one ſide, and with ſome difficulty diſcover'd two Excreſcences ariſing oppoſite to each other from the internal Part of the *Urethra*, near its hither Extremity.

EACH of theſe Excreſcences was near as broad as a Silver Penny, and reſembled the Valves of a Vein in their Situation.

THEIR colour was red, their texture ſpongy, and they conſiſted of a Number of Fibres, as

appear'd upon Examination after being removed.

UPON diſcovering their ſeat and riſe, I proceeded to extirpate them; which I effected in the following Manner.

THE Patient being laid upon her Back, and her Knees bent and rais'd, I divided the *Urethra* a little way obliquely upwards on its left ſide with a Pair of Sciſſars, then I proceeded to ſnip off the Excreſcences at their roots, to do which, the previous Diviſion of a Part of the *Urethra* afforded me ſufficient room.

THE Operation was expeditious, but painful. There was very little diſcharge of Blood at firſt. In a few Hours after the Operation, the wound bled profuſely, but at length ſtop'd of itſelf.

FROM this time, ſhe had no other inconvenience or pain in the Part, than what aroſe from the Acrimony of the Urine, which gradually abated till the Wound healed, which was in about ten Days after the Operation.

THE only Applications made uſe of to the Parts, were Fomentations of warm Water and Milk, and afterwards a doſſil of Lint ſpread over with cooling Ointment, and repeated twice or thrice a Day.

I HAD the Curiosity to call upon her, about five Months after her Cure. She informed me, that she had continued perfectly well without the least Return of her Complaint, and that her monthly Discharges had been regular ever since I left her, without producing any of her former Symptoms.

CASE XXXII.

A remarkable Instance of a Wound, by which the Tibia *was entirely divided.*

ON the 9th of *October* 1749, *J. L.* aged 44, receiv'd two remarkable Wounds from his Antagonist, who struck him with a Hedging-bill. The one upon the upper Part of his left Leg, immediately beneath the Insertion of the Tendon of the *Patella*, by which the *Tibia* was entirely divided, without any remarkable contusion of the Integuments, or neighbouring Muscles; the other on the left Side of the Head, which divided the *parietal* Bone quite to its *Diploe*, and he lost a considerable Quantity of Blood, before any Assistance could be procured him.

THREE Days after the Accident, he was admitted into the Hoſpital and put under my care. His complaints were a Giddineſs, Fever, and Coſtiveneſs; for which he was let Blood, and Stools were procur'd by a Clyſter; from this treatment he was conſiderably relieved. The following Day, his Giddineſs had quite left him, and his Wound had a favourable aſpect, which continued to go well on, till the 21ſt Inſtant, when the Diſcharge was conſiderably increaſed, appear'd oily, and ſmelt very fœtid. He had reſted but little the preceding Night, and complain'd of great lowneſs and oppreſſion. Upon preſſing the Ham, a conſiderable Quantity of Matter was diſcharged, and upon introducing the Probe, both Bones were found bare. From this time, the Diſcharge continued to increaſe till the 26th; for which reaſon, I made a counter Opening, in order to procure a more depending Orifice for the Evacuation of the Matter. On the 27th, he was attack'd with a Looſeneſs, attended with a Fever, and reſtleſs; which ſeveral Symptoms continued till the 4th of *November* following, when his ſtrength became greatly impair'd, his appetite quite loſt, and colliquative ſweats coming on,

it

it was judged adviſeable to Amputate the Limb, which was done above Knee, and the Patient recovered; all his bad Symptoms diſappearing from the Day of the Operation.

UPON examining into the Condition of the Leg, the *Tibia* and *Tibula* were found carious for a conſiderable Length.

THE wounded *Cranium* became granulated, and was quite healed in a few Weeks, without any exfoliation or difficulty attending its management.

REMARK.

THE Looſeneſs, Fever, *&c.* which came on ſo many Days after the Accident, could not be attributed to the Pain and loſs of Blood ariſing from the recent Wounds, as the Patient had been quite eaſy and well for ſeveral Days together; nor could they ariſe from any Impropriety in his diet, *&c.* ſince he had been kept in the moſt abſtemious and quiet Manner, from the Time of his Admiſſion into the Hoſpital; but theſe Symptoms may reaſonably be accounted for from the fœtid Matter being abſorbed into the Blood, and falling upon the tender *Viſcera*; and it is moſt likely, this was the Caſe, ſeeing the ſeveral bad Symptoms of Looſeneſs,

Fever, and Lowneſs immediately diſappear'd, upon the Removal of the Part affected.

Query. Is it not probable, from the Circumſtances I have mentioned, that if the Operation had been deferr'd, the Patient muſt have ſunk under the Diſcharge, or have died from a Reflux of the Matter into the Maſs of Blood?

IF theſe Arguments are of any weight (which ſeem to be ſupported by many Inſtances given us by Authors of undoubted Authority) the Operation was beyond diſpute adviſeable, and muſt in general be ſo, where compound Fractures, Wounds, or Abſceſſes of the Joints are attended with the like Symptoms. For though there may be a few Inſtances of the recovery of People, who have been nearly under the ſame Circumſtances, yet I think, they are by no means ſufficiently numerous to induce one to truſt to any other method of preſerving Life, than by having recourſe to the Operation. To which the Patients generally ſubmit with great reſolution, in expectation of a Recovery.

CASE

CASE XXXIII.

A ſingular Inſtance of a diſeaſed Joint requiring Amputation.

IN the Year 1744, *T. C.* accidently injur'd his Knee by a Fall, it appear'd ſwell'd, and continued painful for ſome Months; but at length, by proper management, grew quite well, and ſo continued for three Years; when his Symptoms return'd with violence, and increaſed for three Months, notwithſtanding the Aſſiſtance given him by a neighbouring Surgeon; who, beſides the Uſe of Fomentations, and other various applications to the Part affected, made him an Iſſue by Inciſion juſt below, and on the Outſide of the diſeas'd Knee, which was kept open for ſix Weeks, and then dried up. About a Month after the Iſſue was healed, a diſtinct Tumour appear'd immediately below the *Patella* and on its outſide, which burſted of itſelf, but diſcharg'd very little. However, he grew conſiderably worſe from this time; his appetite became bad,

bad, and his Leg and Thigh began to waſte. Under theſe Circumſtances, he was admitted into the Hoſpital. But notwithſtanding the ſeveral Methods uſed for his Relief, his diſeaſe increaſed to ſo great a Degree, as to make amputating the Limb neceſſary, which was done above Knee, and the Patient recovered.

REMARK.

UPON opening the joint, the Integuments were found greatly diſeas'd, the Ligaments appeared conſiderably thickened, and the Extremities of the *Os Femoris* and *Tibia* greatly enlarged, and their *Cartilages* eroded.

BESIDES theſe *Phænomena* which are common to almoſt all diſeaſed Joints requiring Amputation, it had one thing peculiar to itſelf, which was, that it contain'd five Peas which were confin'd within the *Capſular*, or *Burſal* Ligament of the Knee. I examin'd whether I could diſcover the opening made by the Peas through the Ligament, but could not. It is to be obſerv'd, that the Iſſue had been healed up for near three Months before the Amputation.

CASE

CASE XXXIV.

Of a fractur'd Patella.

A. *B.* aged 25, in *Auguſt* 1747, broke her Knee-pan by a fall down Stairs, for hich ſhe put herſelf under my care. The xtremities of the divided Bone were at a onſiderable Diſtance from each other, but by xtending the Leg, and gently preſſing the Muſcles, and Tendons of the Thigh above ne fractur'd Part, I brought them to within n Inch of each other, and they were retain'd in nis Situation by a proper compreſs and Bandage. In a few Days after their Reduction, gently moved the Knee, by carefully bending and extending it, which was repeated very Day during her cure. At the end of x Weeks, ſhe appeared ſo well recover'd, as be able to walk upon plain Ground, or up nd down Stairs with very little inconvenience. he could bend and extend her Knee very ell; the Parts of the fractured Bone remaining at the ſame Diſtance from each other, in which

which they were at first placed. I observe during my care of her, that she had formerly broke her other Knee-pan, and that the Part of the fractur'd Bone were then at least three Inches distant from each other. She inform'd me, that she had never applied to any one for Assistance in this case; and that during the whole Time she had been capable of walking about, but was lame for three Months after the Accident. Since which time, she has enjoy'd the free use of her Leg, and has been capable of walking upon plain Ground, or up and down Stairs without pain or difficulty.

CASE XXXV.

Of a fractur'd Patella.

S. *P.* 43 Years of Age, broke her Knee-pan in *October* 1748 by a fall down Stairs, for which accident she was recommended to my care. Upon enquiry, the whole Knee appeared greatly contus'd, attended with a considerable Ecchymosis and Tumour, which could not be dispers'd for near three Months.

Upon

Upon the Removal of theſe Complaints, the Extremities of the fractur'd Bone were diſcovered to be near two Inches from each other; her Knee appearing at the ſame Time ſtiff and inflexible, in which ſtate it remain'd for ſome time afterwards; but by the uſe of Fomentations, relaxing Ointments, and daily pains being taken in bending the Joint; it at length became flexible, and ſhe was capable of walking upon plain Ground without any lameneſs, or other inconveniency, but the going up and down Stairs, was attended with more difficulty.

REMARK.

THE Method recommended above, in the Treatment of tranſverſe Fractures of the *Patella*, is very different from the general Rule laid down by Writers to be obſerv'd in the like Caſes. Their advice being, to bring the Extremities of the Bones, if poſſible, into Contact with each other, and to keep the Leg immoveably extended for eight or ten Weeks; but ſince it is found by Experience, that in conſequence of ſuch Management, the Joint becomes ſtiff and inflexible, from, probably the *Callus* of the broken Bone and

Synovia

Synovia of the Joint mixing together, an
ſoldering up the Joint, there is no doubt o
the great Impropriety attending this metho
of Treatment; and for theſe reaſons, it is nov
a Cuſtom with ſome of the moſt eminent i
the Profeſſion, to treat theſe Accidents i
the Manner I have preſcrib'd, preferable t
that which has been advis'd by Authors
by which means, the Motion of the Part i
ſtill preſerv'd.

CASE XXXVI.

Of a Diviſion of the Tendo Achillis.

WHEN a Tendon is in part divided b
a ſharp Inſtrument, or wholly broke
through, in conſequence of Jumping, Dan
cing, or any other extraordinary Violence;
is agreed, that the bringing the divided Ex
tremities into contact with each other, an
the keeping them ſo for a certain time b
the helps of Compreſs and Bandage, are ge
nerally ſufficient to compleat a Reunion, o
at leaſt an Adheſion of theſe parts, to th
neigh

neighbouring ones, without any farther Operation. It is nevertheleſs advis'd by Writers, who approve of this method under the like Circumſtances, to make uſe of the Needle and Ligature, when the Tendon with its Integuments becomes totally divided by a ſharp inſtrument.

BUT from the ſeveral Inſtances of divided Tendons, which have come under my Cognizance, and which have been ſo treated, I have obſerved, that the Parts always ſuffer conſiderable Pain and Inflammation from being ſtitch'd, and generally terminate in Abceſſes of the neighbouring Integuments, and loughs of the Extremities of the Tendon, hrough which the Needle and Ligature have been paſs'd; by which means, the Cure is conſiderably retarded, and extraordinary pain ncurr'd. So that from theſe Obſervations, and rom many others, I am induced to recommend a total Diſuſe of the Needle and Ligature, and to truſt to a favourable Poſition of the Limb, aſſiſted by proper Compreſs and Bandage. Again, the Needle and Ligature hould not only be rejected in Diviſions of he Tendons, but in all other recent Wounds, where

where Compreſs and Bandage can be apply'
to advantage.

A. B. had the Misfortune of dividing th
Tendo Achillis, about two Inches above th
Os Calcis by the Slipping of an Ax, wit
which he was at work. He was put unde
my care. Upon Inſpection, I obſerved the uppe
Part of the Tendon to be at a conſiderable Di
tance from the Lower in conſequence of th
Contraction of the *Gaſtrocnemii Muſcles*. I mad
uſe of no other method in bringing the Extre
mities together, than bending the Knee, extend
ing the Foot, and gently compreſſing the Le
downwards from the Calf; which, being don
I applied a Bandage from the Ham, quite t
the upper Edge of the Wound. At the ſam
time, obſerving to keep the Foot extended
which was ſecured in this Situation by th
help of a Piece of Paſte-board properly adapte
to the Foot, and ſecured on by a ſecond Ban
dage. The Parts were kept in this poſtu
for five Weeks; at the end of which tim
the Wound was heal'd, and the Extremiti
of the Tendon appeared perfectly reunited,
at leaſt adhered to their neighbouring Par
The Ancle became ſtiff from being conſtant

ke

kept in this poſition, but by the uſe of Fomentations, and an Embrocation of Neats-foot Oyl, it ſoon became pliant, and perfectly uſeful.

CASE XXXVII.

Of a Diviſion of the Flexor Tendons of the Wriſt.

A. B. accidentally run his Hand through a Pain of Glaſs, which cut his Wriſt on the fore Part, quite a-croſs. The upper cubital Artery was divided, and bled profuſely, but was ſtopt without much difficulty by the Needle and Ligature. The Tendons of the Flexor *Carpi Radialis*, *Palmaris longus*, and Flexor *Carpi Ulnaris Muſcles*, were likewiſe divided, and their upper Extremities were drawn at a conſiderable diſtance from the lower ones; the Flexor Tendons of the Fingers were in part divided; however, upon bending the Hand, and preſſing the Arm downwards, the Parts were brought together, and kept in that Situation till cured;

which was in twenty-five Days after the Accident. Upon healing the Wound, the Parts appeared ſtiff, and ſomewhat uneven, but by the help of Fomentations, relaxing Oyls, and gentle extenſion frequently made uſe of, they perfectly recover'd their free Motion, uſual Strength and Eveneſs.

I SHOULD not have thought theſe Caſes worthy of Communication, had not they been merely intended as an Illuſtration of the Advantages of this Practice, preferable to the other Method.

IT is worth obſerving, that the Inflammation which ſucceeded upon this method of Treatment, was no more than what always happens to other parts in inciſed Wounds of equal depth and ſize, and that there were neither Abceſſes, nor Sloughs in conſequence of the Accident, or Management of the divided Tendons.

CASE

CASE XXXVIII.

Of a Rupture of the Tendo Achillis.

A. B. had the Misfortune to break the *Tendo Achillis* entirely in two by Jumping, but as he was ignorant of the Injury he had ſuſtain'd, he was carried home, and had not proper Aſſiſtance given him till a Week after the Accident, when he was recommended to my care. Upon Examination, I found the *Tendo Achillis* entirely ſeparated; the Extremities of the divided Parts were at leaſt an Inch and half diſtant from each other, and the Patient complain'd of conſiderable Pain. I proceeded to the Reduction of the divided Parts which I effected with ſome difficulty by extending the Foot, bending the Knee, and forcibly compreſſing the Muſcles downwards. When this was done, I placed a Compreſs upon the Leg, from the Ham down to the upper edge of the divided Tendon, and upon this, applied a Roller, with a Degree of tightneſs ſufficient to prevent the Con-

traction of the Muſcles, called *Gaſtrocnemii*; when this was done, I placed a Linen Compreſs upon the upper Part of the Foot, and upon that, a piece of Paſte-board, which were ſecured on by Bandage, and the whole Leg was tied up in a Pillow. He became eaſy ſoon after the Reduction of the Tendon, and ſo continued till he left me, which was in about five Weeks; during which time, the Compreſs and Bandages were renew'd as occaſion required. The Extremities of the Tendons remain'd together, but he continued lame and weak in the Part for ſome time, till at length he recover'd the Uſe and Strength of the Limb. I did not obſerve, that there was any waſting of either of theſe Limbs, as is not uncommon after Accidents of the like kind.

REMARK.

IF it ſhould be inſiſted upon, that the Needle and Ligature are ſtill adviſeable in Tendons that are divided by a ſharp Inſtrument, they cannot but be equally ſo in Tendons that are divided by being ruptured where there is no injury done to the Integuments; but I fancy it will be allowed upon conſideration, that a divided Tendon is as likely

to

to do well, as a ruptured one, where the Parts may always in recent Caſes be brought together with equal eaſe, and kept ſo by a proper Situation of the Part, aſſiſted with Compreſs and Bandage.

Monſieur Faget's *Remarks on the Uſe*, &c. *of the Styptic purchas'd by his Moſt Chriſtian Majeſty*; *communicated by* James Theobald, *Eſq*; F. R. S. *inſerted in the* philoſophical Tranſlations *for the Year* 1753.

December 7, 1752, about the end of the Year Seventeen hundred and fifty. Mr. *Broſſard*, a Surgeon from *Berry*, came to *Paris* to propoſe the uſe of a Remedy, which h had diſcover'd for ſtopping the Blood afte Amputations, and which he aſſerted, to have found effectual in ſeveral Amputations of the Arms and Legs.

AT his requeſt, ſome Gentlemen of the Academy of Surgery were deputed, in whoſe preſence he was to make ſome new Experiments in ſtopping the Blood upon different Animals, and in all which he ſucceeded, by ſtopping it in the largeſt Arteries after Amputation. But the Succeſs of this Remedy

might yet be conſider'd a little dubious, becauſe many Animals, as in Dogs particularly, the great Arteries ſtop of their own Accord; and rarely any Dog dies from an *Hæmorrhage*, becauſe their Blood is more diſpoſed to congeal, and by that means to ſtop the Diſcharge.

FOR this reaſon, the Experiments made on Animals not being thought ſatisfactory, and yet being convinced, that no ill effect could follow the Application of this Remedy on human Kind, Mr. *Broſſard* was permitted to uſe it at the Hoſpital of the Invalids, in an Amputation of the Leg, which ſucceeded perfectly well; and not the leaſt ill Accident happened through the whole time of the Cure.

SOMETIME after this, two Waggoners were run over by a Waggon loaded with Stone, and each of them had one Leg broken in a miſerable Manner. Theſe two Men being brought to the Hoſpital of the Charity, I ſaw no other hopes of Succeſs, but in amputating the Legs; and, for that reaſon, I requeſted Mr. *Broſſard* would be preſent, and give me a Proof of this new Application, which we applied in the following Manner.

As ſoon as the Leg was cut off, I ſlackened the Tourniquet to diſcover the Veſſels, and Mr. *Broſſard* applied upon the Orifices of the two Arteries, two pieces of his Aſtingent, faſtened one upon another with a Ribband, in the Manner which I have ſent to you, and as it is in the Drawing. After the Application was made, I ſtreightened the Tourniquet, and paſs'd the two ends of the Ribband, which was faſtned to the upper Piece of the Aſtringent, upon the Stump, over the Knee, and applied a Linen Bag, fill'd ſlightly with the ſame Aſtringent in Powder, upon the whole Wound; and, over all, applied the common Dreſſings in the like Caſe. After the Dreſſing was finiſh'd, I ſlackened the Tourniquet, and two Hours after, took it entirely away. Eight and forty Hours after this, we took off the Dreſſings, and not the leaſt drop of Blood follow'd from the Veſſels; and we again applied one ſingle piece of the Aſtringent upon the two Veſſels; and I dreſs'd the other Parts of the Wound with Pledgets of Lint, with common digeſtive, a Styrax Plaſter, and the uſual Bandage.

THE third Day the Aſtringent fell off of itſelf, in the time of Dreſſing; and the Patient,

that time was dreſſed in the common Manner. The ſame was done to the other Patient, after the Amputation, as to this.

THE firſt of theſe Men died on the fifth Day, and the other on the ninth; but there did not appear through the whole, the leaſt tendency to an *Hæmorrhage*. Thus the Remedy fairly produc'd its effect, as to the ſtopping of the Blood.

HOWEVER, in order to determine the Manner, in which this Aſtringent produces its effects, I examin'd the blood Veſſels of thoſe two Patients after their death, and I found them contracted and ſtraitned, as if they had been tied, and in the largeſt of them a conic Coagulation of the Blood, which was an Inch and half long; and after having taking out this Coagulation, it was with difficulty, that I could introduce the Point of a very ſmall probe into the Orifice of that Veſſel.

THE Patient who died on the ninth Day, had the Arteries contracted in the ſame Manner; but with this difference, that the Congelation was at leaſt four Inches long.

Mr. *Morand* has employ'd this Remedy with Succeſs, in applying it to a Wound made by

by a Sword in the bending of the Arm; and, I myſelf have made uſe of it, with great Succeſs on occaſions where the temporal, and intercoſtal Arteries have been opened.

IN the laſt mention'd Caſes, I applied but one piece of the Styptic upon the opening of the Artery; and this generally falls off at the firſt Dreſſing, that is, forty-eight Hours after the Application, without the leaſt Appearance of an *Hæmorrhage*, or other ill Symptoms which can raiſe any Objections to this Styptic; for thoſe Patients are all recover'd.

THERE have been lately made at the Hoſpital of the Invalids, two Experiments of this Aſtringent in Amputations; and in both, the Succeſs has been equal to all that can be deſir'd. The Surgeon, in theſe Caſes, us'd only the two Pieces applied one upon the other, without uſing the Powder in the Bag, as before; and dreſs'd the whole Wound with Lint, and the common Bandage.

THUS, then at laſt, there appears to be diſcover'd a Remedy beyond our hopes, and which Art has never yet equall'd. The Application of Fire was the cruel Reſource of the Ancients; and *Paré* believ'd himſelf inſpired, when he diſcover'd the uſe of the

Li-

Ligature. But, alas! how many Accidents are there, which ariſe from the uſe of thoſe two Manners, and which too often terminate in the Death of the Patient! Happy for us, that thoſe Accidents now appear to be no longer to be fear'd by the lucky Diſcovery of this Styptic, the firſt Experiments of which have ſo greatly promis'd Succeſs?

IT may be remark'd, that, if this Aſtringent ſucceeded only in coagulating the Blood, it has produc'd nothing extraordinary, for theſe Coagulations would not have been ſufficient to have ſtopp'd the *Hæmorrhage*, directly after the Operation in Amputations; but its excellency lies in contracting the Arteries ſo cloſely, that it hardly lets a little Probe into the Aperture of the Artery, and by this means, forms as it were a perfect Ligature, much more certain than the uſual one, as this is not made in any one point of the Cylinder of a Veſſel. Thus this Application exceeds every thing, which has hitherto been produc'd by the Operation of our hands.

THIS ſingularity in the Operation of this Remedy, ſuppoſes another in the Veſſels, which is the great Contractility of the Fibres of the Arteries. Theſe, indeed, do naturally contract

of

f themſelves, but not to two thirds of their Diameter; nor to that ſtate, in which they re ſtraitned by the effect of this Aſtringent; ecauſe by that, the whole Aperture is alnoſt intirely taken off in the largeſt Veſſels, nd it is eaſy to imagine their Effects in the malleſt.

IT may be obſerved, that it is not in the lead parts of Bodies that this Contraction can e made; it requires the Aſſiſtance of the vital Principal, and operates on the Fibres by certain Articles contain'd in it, which diſpoſe he Animal Body, by its Irritation to ſhorten ts Fibres, and reduce the tiſſue which they ompoſe in a leſſer Volume.

THIS Remedy, of which I have been peaking, is nothing elſe but the Agaric of he Oak. The beſt kind of it is found on he Parts of Oak-trees, where the large Limbs ave been cut off, and it very often reſembles Horſe-ſhoe in its ſhape. This Agaric is liſtinguiſh'd into four parts, the Rind; the ſeond Part, which is preferable to the other; he third Part ſerves for the ſtopping the Blood n ſmaller Veſſels, as well as that part which ouches the Tree; this laſt was what was pow-

powder'd, and applied in the little Bag, a in the Operations of the Charity.

THE ſecond Part is what I make uſe o in Amputations, which is cut into pieces, o the Size of that which I have ſent you. I muſt be beaten by a Hammer till it is ſoft and this is its whole preparation. Every par is prepared alike.

THE beſt time of collecting it, Mr. *Broſ ſard* has found to be in the *Antumn*, in fin Weather, after great Heats.

THIS, then, Sir, is all I can collect of th Uſe, Application, and Preparation of thi new Remedy for ſtopping Blood. If the *Roya Society* ſhall find any thing in it worthy thei regard, I ſhall think myſelf happy in havin communicated theſe Obſervations.

AT the time of reading the above Me moir, ſome bits of Agaric were exhibited t the *Royal Society*, part of which was deli vered to me to make trial with, upon th next Opportunity, which I did in a few Day after with Succeſs; and preſented the follow ing Account of its effects to the *Royal So ciety*, which was read by one of the Secre taries.

De

December the 14th, 1752, Thursday. Hatton-Garden.

AGREEABLE to the Desire of this Society, I have taken the first Opportunity of Communicating the Effects of the Agaric of the Oak in stopping of *Hæmorrhages*, or bleeding from the principle Vessels after Amputation. If I have been too circumstancial in my Narrative of the Symptoms and Circumstances attending the following Case; I hope you will attribute it merely to the Desire I have of giving you all the Satisfaction I am capable of, relating to the Experiment made with this Styptic; and this I have been more particularly induc'd to, as it is the first Case of the Kind offer'd to your Consideration, where this Application has been made use of in *England*.

CASE

CASE XXXIX.

Of an Amputation of the Leg.

SATURDAY *December* the 9th, 1752 C. S. aged 24, had her Leg amputated below the Knee, at twelve o'Clock at Noon on account of an incurable Ulcer, with which ſhe had been afflicted for 13 Years. She loſt very little Blood in the Operation. Immediately after the Amputation, a Piece of Agaric of a proper Size. (The ſame which was deliver'd to me by the *Royal Society* for this purpoſe) was applied to the Mouths of the Principal Arteries. Two other ſmall pieces of Agaric were applied to the Mouths of two ſmaller Arteries, which appear'd at ſome diſtance from the principal ones. Upon the Pieces of Agaric, Doſſils of Lint were applied, and over all, a Pledgit of Tow ſpread with yellow Baſilicon, which were kept on by the common Bandages made uſe of in ſuch caſes, and applied with the uſual degree of tightneſs.

For

FOR about an Hour and quarter after the Operation, the Tourniquet was kept on moderately tight at a convenient Diſtance above the Knee, at the end of which time, it was ſlackened ſo as to have no degree of Preſſure upon the Femoral Artery. The Patient was much eaſier than I had ever obſerv'd after the uſe of the Needle and Ligatures. Her Pulſe appear'd very little diſturb'd, till about four o'Clock this Afternoon, when the Symptomatic Fever began to come ſlightly on, attended now and then with convulſive twitchings of the Stump and Thigh; for which reaſons, the Tourniquet was ſomewhat tightned. At ſeven o'Clock this Evening, the Tourniquet was quite let looſe; ſoon after which, the convulſive Twitchings became leſs frequent, and leſs ſevere; Theſe Spaſms of the Limb, ſhe had been long uſed to have, and by her own account, they had been more ſevere before the Operation, than ſince.

SHE had but little reſt this Evening; *Sunday* Morning ſhe appeared as well as could be expected, her Pulſe was calm, and ſhe had no particular Complaints. At twelve o'Clock

o'Clock at Night, ſhe fell aſleep, and ſo continued till ſeven o'Clock the next Morning.

Monday Morning ſhe appear'd well, her Pulſe was calm, and ſhe had no particular pain. *Monday* Night ſhe ſlept but little, but was very eaſy the whole Time; *Tueſday* Morning ſhe appear'd very well, and her Pulſe quiet; this morning, ſhe was dreſs'd in the uſual Manner, her wound appear'd with a very good Aſpect. She has ſuffer'd no pain in the Part where the Agaric was applied, and is in all reſpects as well as can be expected. At ſeven o'Clock this Evening I viſited her, ſhe was perfectly eaſy, the convulſive Twitchings, of which ſhe at firſt complain'd, are quite remov'd.

Thurſday December 14, ſhe continues well; her Wound was dreſs'd again this Morning, from which there appear'd a very proper Diſcharge of Matter, not in the leaſt tinged with Blood. The whole of the Agaric with the reſt of the Dreſſings were remov'd without giving pain. Upon the Removal of the Agaric, I enquired narrowly, whether I could diſcover the Extremities of the Arteries, or their Pulſation, but there was not the leaſt ap-

appearance of either of them: From this time she continued to mend without the least Interruption, till she was was dismiss'd the Hospital.

A short History of the Effects of the Agaric of the Oak, in stopping of bleedings, after some of the most capital Operations in Surgery; with an Account of the Manner of its acting upon the Vessels; communicated to the Royal Society.

IN *December* 1752, I had the Honour of communicating to the *Royal Society*, the good Effects of the Agaric of the Oak in the Case of a young Woman aged 24, whose Leg I had cut off below the Knee. Since that time, I have not heard of any farther Trials which have been made with it, or of any Accounts that have been given to the *Society* of its great Usefulness in Surgery. This may, probably arise from the Virtues of the Agaric not being as yet much known in *England*, or from the unwillingness of Surgeons to adopt such a Method as they may probably suppose to be attended with hazard. The great Success which attended

my firſt Experiment of this kind, was a ſufficient Inducement to me, to make a farther trial of it in other Caſes of the like Nature. This I have lately done in four more Inſtances; all of which have been attended with Succeſs, equal to the firſt. The particular Advantage of the Agaric is evidently this, that it has the Power of effectually reſtraining the Bleeding without giving Pain; for which reaſon, there appears to be much leſs of the Symptomatic Fever, than what occurs after the uſe of the Needle and Ligature; which is, by much, the moſt painful Proceſs of the Operation in Amputations, and is ſometimes productive of Convulſions, as has been obſerv'd by Monſieur *Le Dran* in his Chapter of *Amputations*, under which Circumſtances he particularly adviſes the cutting the Ligatures, *&c.* The Ligatures have ſometimes the farther Inconvenience of remaining quite fix'd to the laſt, on which account they unavoidably retard the healing of the Wound.

BESIDES the Effect of reſtraining the *Hæmorrhage* in all recent Wounds, which the Agaric has in common with the Ligature, it

it has one great Advantage peculiar to itſelf, which is that of effectually reſtraining the Bleeding, in Wounds of ſeveral Days or Weeks ſtanding, where the Parts are become ſo rotten as to be incapable of bearing the Ligature. This I have know to have been the Effect of it in ſeveral Inſtances, where the Ligature has been attempted in vain. The Manner in which the Agaric acts, is by contracting, or purſing up the Extremities of the divided Veſſels. I had an opportunity of enquiring into this Fact in a Patient, whoſe Leg was cut off below the Knee. Immediately after the Amputation, pieces of Agaric were applied to, and properly ſecur'd upon the Mouths of all the principal Veſſels. In about an Hour after the Operation the Stump bled a-freſh, on which account I remov'd all the Dreſſings, except thoſe pieces of Agaric that were at firſt applied. This gave me an Opportunity of diſcovering the Source of the *Hæmorrhage*, which was from a collateral Veſſel at leaſt an Inch diſtant from the principal ones. When I had ſecur'd the Veſſel, I had the Curioſity to remove the bits of Agaric from

thoſe very parts to which they were at firſt applied. I obſerved the Mouths of the Veſſels to be totally contracted in ſo ſhort a ſpace of Time, and to be capable of reſiſting the whole Force of the Circulation; the Extremities of the Veſſels being alter'd from their natural Shape of a Cylinder, to that of a Cone. After having ſaid thus much in favour of the Agaric, I ſhall conclude with a Reference to the following Caſes, as ſome Confirmation of what has been above advanced.

CASE

CASE XL.

Of an Amputation of the Leg.

CASE the 1ſt.

MAY 1754, *J. L.* aged 51, had been long afflicted with an Ulcer in his Leg, which at length became ſo general (occaſioned by an impoveriſhment of the whole Maſs of Blood, and a conſtant ſlow Fever with which he had been for ſome time afflicted) as to deſtroy the greateſt Part of the Tendons and Muſcles, from the Calf of the Leg down to the Ancles. The Diſcharge from the Wound had been for ſome Weeks ſo exceſſive, as to reduce him to the greateſt Extremity; and the whole Subſtances of the *Tibia* and *Fibula* appear'd quite rotten for a conſiderable Length.

IN conſideration of the foregoing Symptoms, it was recommended to him to part with the Limb (though at the ſame time the Succeſs of the Operation was judged to be very precarious, on account of his great

weakneſs, and bad habit of Body) which he readily aſſented to, and I perform'd the Operation in the following Manner.

THE Patient being ſeated upon a Table of a convenient Height, and properly ſecur'd by Aſſiſtants, a Linen Compreſs about two Inches broad was applied round the Thigh a little above the Knee. Upon this, the Screw Tournequet was fix'd, with a degree of tightneſs ſufficient to prevent the Courſe of the Blood through the Femoral Artery.

THIS being done, I applied a Piece of Tape round the Leg, about five Inches below the Knee, as a Direction for the Knife; then I proceeded to divide the Integuments quite through, which were drawn back by an Aſſiſtant, and afterwards divided the Muſcles as near as poſſible to the Integuments quite to the Bone. Immediately after this, I introduced the Catline betwixt the *Tibia* and *Fibula*, with which I divided the *inter oſſeous* Ligament, *&c.* and then proceeded to ſaw through the Bones.

IMMEDIATELY after the Amputation, I look'd for the principal Veſſels, and eaſily diſcover'd them without ſlackening the Tournequet (which

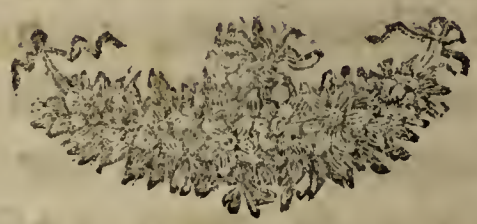
(which I have ſeldom had occaſion to do in Operations of this kind.) Upon the Mouths of theſe, I applied ſmall bits of Agaric, about the Size of a Shilling, as well as upon the Mouths of the ſmaller Veſſels, which diſcover'd themſelves by their oozing. Upon the bits of Agaric, I applied ſoft layers of Lint. All theſe were cover'd with a Pledget of Tow ſpread with yellow Baſilicon, and properly ſecur'd on by the common Bandage.

ABOUT three or four Minutes after, he was roll'd up, and put to bed, I diſcovered the Blood to Diſcharge freely through the Dreſſings, upon which, I tightned the Tourniquet in expectation of ſtopping the Bleeding, but it appear'd evidently to encreaſe it.

SEEING this uncommon effect, I quite ſlackened the Tourniquet, upon which the Bleeding immediately ceas'd. This I was led to from a Suppoſition, that the Veins had probably ſuffer'd ſo great a Compreſſion from the Inſtrument, as to be incapable of returning that Blood which was carried to the neighbouring Parts by the collateral Arteries, ariſing from the principal Trunk, above the

Ligature. But whether this was the true Reaſon or not, I cannot take upon me to determine; however the Fact was, that the Bleeding immediately ceas'd, and did not return again.

THE Patient was dreſſed on the fourth Day after the Operation, and the whole of the Agaric was removed. Since then, he has been treated in the common Method without any farther uſe of the Agaric. The Patient has had very little Fever, or Pain ſince, and was well in health nine Weeks after the Operation, but the Wound was not then healed.



CASE

CASE XLI.

Of an Amputation of a Breaſt.

CASE the 2d.

MAY 1754, *E. H.* a very luſty Woman, 38 Years of Age, had been afflicted for ſome time with a diſeaſed Breaſt, which at length became cancerous. The Baſis of the Breaſt was much larger than common, and was complicated with a conſiderable Schirrous Knot which extended to the Arm-pit.

As things were thus circumſtanced, it was plain that nothing could be adviſed, but the Amputation of the Part; which ſhe conſented to after ſome Weeks deliberation, and I performed the Operation in the following Manner.

THE Patient being ſeated upon a long Stool of a convenient Height, and an Aſſiſtant behind her, who ſecured her by claſping her round the Waſte, I ſeated myſelf in a Chair oppoſite to her, and ſupporting the Breaſt

Breaſt with my left Hand, I began with ma king a ſemicircular Inciſion upon its ſuperio Part with a round edged Knife, which wa continued quite to the pectoral Muſcle. Afte this, I diſcovered an adheſion of a Part of th Baſis of the Breaſt to the pectoral Muſcl from whence I ſeparated it; then I proceede to divide the Integuments quite round on it inferior part, and finiſhed the Amputation b diſſecting the inferior Part of the Breaſt fron the lower Part of the pectoral Muſcle, upo which it lay looſe, and quite free from ad heſion.

IN the Operation, ſeveral Arteries of a con ſiderable ſize were divided, which were com preſſed by the Fingers of an Aſſiſtant, till th whole of the Breaſt was removed.

AFTER cutting off the Breaſt, I made a longi tudinal Inciſion through the Integuments quit to the Extent of the Schirrous Tumour, whic afforded me ſufficient Room to diſſect it out

IN removing the Tumour, I neceſſarily di vided a conſiderable Artery which nouriſhe it.

THE Wound was large, and bled freel from five or ſix Arteries.

I MADE uſe of no other method to ſtop the Bleeding, than the Application of pieces of Agaric to the Mouths of the Veſſels, which were properly ſecured on by a Flanel Roller, after being firſt covered with common dry Lint, and a Pledgit of Tow ſpread with Digeſtive. The ſymptomatic Fever was very ſlight; ſhe has been quite free from thoſe painful Spaſms, which conſtantly ariſe from the uſe of the Needle and Ligature. There has not been the leaſt loſs of Blood ſince the Operation. Her Wound was dreſſed on the fourth Day, when the whole of the Agaric came away. Since then it has been treated in the common Method. She is very well, and her Wound was at the Point of being healed in nine Weeks after the Operation.

CASE

CASE XLII.

Of an Amputation of a Leg.

CASE the 3d.

MAY 1754. *G. W.* aged 12 Years, was admitted into the Hoſpital with a Complaint in one of his Ancles and Feet, with which he had been afflicted for ſome time. The Diſeaſe was an Abſceſs in the Joint of his Ancle; and he had another Abſceſs on the upper Part of the ſame Foot, which had diſcharged, and continued to diſcharge ſo much, as to waſte his whole Limb, to bring on an hectic Fever, and to render him incapable of putting his Foot to the Ground without giving exceſſive pain.

HE had very litte Appetite, and the Ligaments of the Ancle and Foot, as well as the Bones were much enlarged, and become carious.

IN conſideration of theſe circumſtances, and not being able to cure, or give him relief by any other Methods, I adviſed the Amputation of

of the Leg, which was complied with, and I performed it on the 13th of *May* 1754, in the Manner as before deſcribed, and in the uſual Place below the Knee.

THE Agaric and Dreſſings were applied as in the preceding Caſes, which anſwered perfectly well in all reſpects.

THE Tourniquet was quite removed in ten Minutes after the Patient was put to Bed. He has had very little Fever, reſtleneſs, or pain ſince the Operation.

HIS Wound was dreſſed on the 5th Day after the Operation, and the whole of the Agaric was then removed.

THE Patient is very well in Health, and his Wound was very near being well in eight Weeks after the Operation.

CASE

CASE XLIII.

Of an Amputation of a Leg.

CASE the 4th.

MAY 1754, *R. B.* aged 54, was admitted into the Hoſpital with a Mortification in his Foot, which, notwithſtanding all the means uſed in Phyſic and Surgery for his Relief, continued to advance till it extended to about two Inches above the Joint of the Ancle, where at length it ſtopped, after having deſtroyed the ſeveral Tendons, Ligaments, and Perioſteum, which belong to the neighbouring Parts.

THE Patient was of a very bad habit of body, his Countenance was ſallow, his Pulſe quick, and languid. He was in a very weak State, and his whole Maſs of Blood greatly impoveriſhed. He at the ſame time had a Mortification in the other Foot, which deprived him of all his Toes.

WHEN the Mortification was ſeparated, and his habit of Body improved by proper Medicines and Time, the Amputation of the Limb was

vas adviſed, and he conſented to it; which performed in the uſual Place below the Knee, on the 21ſt of *May* 1754, and in the ame Manner as has been already deſcribed n the Caſe of *J. L.*

I MADE uſe of no other methods to ſtop the Bleeding than the Agaric, which was applied o the Mouths of the Veſſels, as in the pre-eding Caſes.

IMMEDIATELY after the Operation and Dreſſings were finiſhed, the Patient was re-noved to Bed, and the Tourniquet taken off.

HE has not had the leaſt loſs of Blood ſince he Operation.

THE Pain and Fever have been very incon-derable.

IT is now eight Weeks ſince the Operation as performed; the Patient is alive, and his Wound as near being well, as the Time, his ge, and bad Habit of Body can be ſup-oſed to admit of.

REMARK.

THE Caſe of *J. L.* has ſomething ſingular it, and particularly proves the extraordinary fficacy, and Uſefulneſs of the Agaric.

I HAVE already taken notice, how fr
quently it is impracticable to make a prop
Uſe of the Needle and Ligature in Woun
of long ſtanding; and farther know from E
perience, that it is no uncommon thing
meet with the ſame Diſappointments even
recent Wounds that are made upon diſeaſ
Parts. So that I think it may be reaſonab
queſtioned, whether I ſhould not have m
with the like difficulty in this Subject, had
attempted to ſecure the Veſſels by Ligatures.



CASE XLIV.

Of an Amputation of the Leg.

THIS Operation was performed ſince the Communication of the four preceding Caſes to the *Royal Society*.

July the 6th 1754. *H. R.* a young Man of 24 Years of Age was admitted into the Hoſpital on the 25th of *April*, of this Year, on account of a Diſeaſe in his left Foot.

THE Part was much enlarged and inflamed. He had a Fever, and there was a conſiderable Collection of Matter which pointed on the upper and outer part of the Foot, betwixt the Extremities of the *Tibia*, and *Fibula*.

THE Tumour was opened by Cauſtic, and diſcharged about a Quart of very fœtid Matter.

THERE was a ſecond Abſceſs formed on the Inſide of the Leg, under the *Tendo Achillis*, which was opened by Inciſion.

FROM the Account given me by the Patient, the Diſorder had been about ſixteen Months

ſtanding, and took its riſe from a ſtrained Ancle, which was immediately ſucceeded with conſiderable pain and ſwelling. But by Reſt, and the Application of warm Vinegar to the part, theſe Symptoms were ſoon removed, and he continued eaſy and perfectly well for a few Weeks, when he had the Misfortune to ſtrain the ſame Ancle again.

FROM the Moment of the ſecond Accident, he became lame, his Ancle and Foot ſwell'd, and his Diſorder increaſed for two Months.

IN this Situation, he put himſelf under the Care of an eminent Surgeon. The Tumour terminated in an Abſceſs, and was opened by Inciſion.

THIS Collection of Matter was ſucceeded by ſeveral others, which were opened in the ſame Manner.

THE Wounds were cured in about eighteen Weeks, and the Patient was reſtored to the perfect Uſe and Motion of his Foot.

HE continued quite well for ſix Months, when on a ſudden, the Foot became painful, and ſwelled again without any previous Accident, and ſoon afterwards one of the former

Wounds

Wounds broke out, from whence there aroſe a conſiderable *Fungus*.

IN conſequence of the Diſeaſe, the Leg was become waſted, he was incapable of putting his Foot to the Ground, he reſted very little, his Appetite was bad, his Pulſe quick and low; the whole Ancle and Foot were greatly enlarged.

FROM theſe Circumſtances, and all Attempts to relieve him having failed, it was judged adviſeable to Amputate the Limb; which I did this Morning in the uſual Place below the Knee, and in the ſame Manner as has been already deſcribed.

WHEN the Leg was cut off, bits of Agaric were placed upon the Mouths of the ſeveral Arteries, as in the preceding Caſes, and the ſame kinds of Dreſſings and Bandage applied over them; the Patient was immediately removed to Bed, and in a few Minutes after, the Tourniquet was let quite looſe.

UPON ſlackening the Tourniquet, the Patient complained of a Convulſion in his Stump, which was ſucceeded by a Diſcharge of Blood through the Dreſſings from the *Arteria Tibialis Antica*.

SEEING this, I tightened the Tourniquet, upon which the Bleeding ceaſed. I kept the Tourniquet moderately tight for a Quarter of an Hour, and then looſened it again. The Patient upon its being looſened, complained of a Return of the Spaſm in his Stump, and there preſently enſued a ſecond Diſcharge of Blood from the ſame Veſſel. On this account, I tightened the Tourniquet again, and compreſſed the Femoral Artery; upon which the Bleeding immediately ceaſed. I kept the Ligature moderately tight for about a Quarter of an Hour, and then looſened it till it had no degree of Preſſure upon the Artery. From this time, the Bleeding ſtopped, and did not return again.

UPON the whole, I judge that the Quantity of Blood which was loſt in conſequence of the Operation did not amount to eight Ounces; and of this I am very certain, becauſe I had placed a Baſon under the Stump for the Reception of the Blood, which amounted to about three Ounces; and allowing there was the ſame Quantity, or a little more, abſorbed by the Dreſſings and Rollers, the whole could not amount to more than I have ſuppoſed; which

which Evacuation, after an Operation of this kind, is more likely to be ſerviceable, than injurious to the Patient, when he has not been much reduced by the Diſeaſe.

HE reſted very well the Night after the Operation, he had ſcarcely any ſymptomatic Fever, and the next Morning was perfectly eaſy.

FROM this time he continued to go on very well, without the leaſt interruption, or return of the Bleeding.

HE was dreſſed on the 4th Day, when the whole of the Agaric was removed, and only the common Digeſtive applied to the Wound; I examin'd whether I could Diſcover the Extremities of the Veſſels, or any Pulſation in the Wound, but could not.

HE was dreſſed again on the ſixth Day; he remains very well, has had hardly any Fever or Uneaſineſs, and his Wound is in a perfect good State.

ON the 7th and 8th Dayshe was very well, and has a fair proſpect of a ſpeedy Recovery.

REMARK.

UPON examining into the Condition of the Foot, after it was amputated, a great Part of the Cap-

Capſular Ligament of the Ancle Joint appeared to be deſtroyed. The ſuperior Part of the *Aſtragalus*, and inferior part of the *Tibia* were deprived of their Cartilages. The Integuments and neighbouring Tendons were greatly thickened, and adhered inſeparably to each other. The *Membrana Adipoſa* had the Appearance of a *Cartilage*. The *Tarſal*, and *Metatarſal* Bones were much enlarged.

N. B. THE Reaſon of my diſcontinuing the uſe of the Agaric from *December* 1752, to *May* 1754, was owing to my not being able to procure ſuch as I believed might be depended upon. But ſince I have had it in my power to procure the genuine Species of Agaric, I have always uſed it; and have never as yet met with one Inſtance of its failure; nor have I ever been under a neceſſity of applying it a ſecond time after any Operation whatſoever, except that Inſtance which has been taken notice of in the Introduction to theſe Caſes.

BESIDES the particular Operations of which I have already given an Account, I could treat of ſeveral others, wherein I have applied the Agaric with equal Benefit: But I look upon it as unneceſſary to give a Detail of its Effects upon

upon Veſſels of leſs conſequence than thoſe I have already ſpoken of: concluding it muſt neceſſarily be allowed, that whatever Styptic is powerful enough to ſuppreſs an *Hæmorrhage* from the larger Veſſels, muſt, *cæteris paribus*, be ſufficiently powerful to ſuppreſs an *Hæmorrhage* from the ſmaller, provided it can be applied and retained upon the Mouths of the divided Veſſels with equal advantage; and it is probable that the Application of the Agaric will prove not only of great uſe after moſt Operations where the Needle and Ligature may be advantageouſly uſed, but particularly ſo in ſtopping the Bleeding from thoſe Veſſels which are divided in the lateral Operation for the Stone, as well as the Bleeding from any other wounded Veſſels, which, from their deep Situation cannot be ſecured with the Needle and Ligatures.

F I N I S.